

91-848
RECORD NO. 91-848

Supreme Court, U.S.
FILED
NOV 18 1991

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IN THE
Supreme Court of the United States

October Term, 1991

ROANOKE RIVER BASIN ASSOCIATION
and STATE OF NORTH CAROLINA,

Petitioners,

v.

COLONEL RONALD E. HUDSON, in his official capacity as
Norfolk District Engineer, THE CITY OF VIRGINIA BEACH
VIRGINIA,

Respondents.

PETITION FOR WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

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QUESTIONS PRESENTED FOR REVIEW

I. Is the Corps of Engineers ("the Corps") required to explain how its mitigation condition will eliminate the environmental effects of a proposed project when it relies on mitigation to avoid preparing an Environmental Impact Statement (EIS)?

II. Is the Corps required in a National Environmental Policy Act (NEPA) case to make information on which it relies available for public review and comment before it makes a decision not to prepare an EIS?

III. Is the Corps required to provide a complete explanation of a computer model on which it has relied once substantial questions about the model have been raised?

IV. Has the Corps improperly interpreted and applied binding regulations of the Council on Environmental Quality which govern whether an EIS must be prepared?

LIST OF PARTIES BELOW

APPELLANTS-PLAINTIFFS: Roanoke River Basin Association and State of North Carolina.

PLAINTIFFS: Counties of Bertie, Granville, Halifax, Martin, Northampton, Vance, Warren & Washington, North Carolina; Counties of Charlotte, Halifax & Mecklenburg, Virginia.

APPELLEES-DEFENDANTS: Ronald E. Hudson, in his official capacity as Norfolk District Engineer; Wayne A. Hanson, in his official capacity as Wilmington District Engineer; Joseph K. Bratton, Lieutenant General, in his official capacity as the Chief of Engineers of the United States Army Corps of Engineers; William R. Gianelli, in his official capacity as Assistant Secretary of the United States Department of the Army; John O. Marsh, in his official capacity as Secretary of the United States Department of the Army; and the City of Virginia Beach, Virginia.

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**OPINIONS DELIVERED IN THIS CASE
BY THE LOWER COURTS**

The United States District Court for the Eastern District of North Carolina has delivered two opinions in this case, which can be found at 665 F. Supp. 428 and 731 F. Supp. 1261. The United States Court of Appeals for the Fourth Circuit delivered an opinion, which can be found at 940 F.2d 58. Each is reprinted in the Appendix.

**GROUND'S UPON WHICH
THE JURISDICTION OF THIS COURT IS INVOKED**

The judgment of the Court of Appeals was entered on July 3, 1991. Timely petitions for rehearing with suggestions for rehearing en banc were denied on August 20, 1991. This petition for a writ of certiorari is timely filed within ninety days of this latter date. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATUTES AND REGULATIONS INVOLVED IN THIS CASE

42 U.S.C. § 4332

P.L. 100-589, 102 Stat. 2984 (1988) [§ 5 only]

33 C.F.R. § 325.3

40 C.F.R. § 1500.1

40 C.F.R. § 1506.6

40 C.F.R. § 1507.1

40 C.F.R. § 1508.3

40 C.F.R. § 1508.7

40 C.F.R. § 1508.27

Each is reprinted in the Appendix.

STATEMENT OF THE CASE

I. Background

This dispute concerns a proposal by the City of Virginia Beach, Virginia ("Virginia Beach") to construct a 85-mile long water supply pipeline that would enable Virginia Beach to withdraw up to 60 million gallons per day

(mgd) of water from Lake Gaston, which straddles the boundary between Virginia and North Carolina. The State of North Carolina and the Roanoke River Basin Association have challenged the Corps' decision to permit this proposed pipeline on several grounds, principally that no EIS was prepared as required by the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 et seq. The jurisdiction of the District Court was invoked pursuant to 28 U.S.C. § 1331 (federal question) and 28 U.S.C. § 1361 (mandamus).

A. The Roanoke River System

Lake Gaston is part of the Roanoke River system that drains approximately 9,600 square miles of North Carolina and Virginia. The river rises in southwestern Virginia, flows generally in a southeasterly direction to northeast North Carolina, and eventually empties into Albemarle Sound on the Atlantic. Several tributaries of the Roanoke pass through south central Virginia and north central North Carolina.

There are six major dams on the Roanoke River system, three of which are in the general vicinity of the North Carolina-Virginia border. Proceeding downstream, these are the John H. Kerr Reservoir, Lake Gaston and Roanoke Rapids Lake. Kerr Reservoir is by far the largest of the three and is operated by the Corps of Engineers for flood control, hydropower and low-flow regulation. Lake Gaston and Roanoke Rapids Lake are owned and operated by Virginia Electric & Power Company (VEPCO) as peaking hydropower facilities. The three other dams -- Philpott, Smith Mountain and Leesville -- are upstream of Kerr. JA 491a.¹

The Wilmington (N.C.) District of the Corps operates Kerr Dam and Reservoir according to a "Rule Curve," which is a plan for seasonal reservoir level fluctuations designed to provide the greatest overall benefit to all competing interests.

¹ "JA" refers to the Joint Appendix filed with the Fourth Circuit.

JA 493a. The Corps attempts to balance the two principal project purposes (i.e., flood control and power production), as well as other purposes (e.g., downstream flow augmentation and recreation). JA 1483a. The parties agree that there is already insufficient water in Kerr Reservoir during dry periods to satisfy these competing interests. Brief of federal defendants and City of Virginia Beach filed with the Court of Appeals ("Br.") at 41; see also JA 539a, 1837a; Stip. 18.²

VEPCO operates its Gaston and Roanoke Rapids projects in accordance with a license from the Federal Energy Regulatory Commission (FERC), which requires minimum releases for the protection of water quality and aquatic life. JA 451a-470a. Those mandated minimum releases from Roanoke Rapids range from 1,000 cubic feet

² "Stip." refers to the joint stipulations submitted by the parties to the Supplemental Administrative Record. These stipulations are on file with the Eastern District of North Carolina.

per second (cfs) during the winter to 2,000 cfs from mid-spring through September. The FERC license also requires VEPCO, in accordance with an agreement between the Wilmington District of the Corps, the North Carolina Wildlife Resources Commission and VEPCO, to release augmented flows each spring during the time of spawning by striped bass downstream of Roanoke Rapids if adequate storage for that purpose is available at Kerr. When water is available between March 1 and April 15, the Corps raises the water level in Kerr Reservoir to 302 feet (above mean sea level) to accumulate sufficient water to allow flow augmentation for striped bass spawning activity below Roanoke Rapids during the spring. JA 397a.

Most of the water in Lake Gaston and Roanoke Rapids Reservoir comes from Kerr because 92.6% of the flow at Roanoke Rapids Dam is attributable to inflows above Kerr Dam. JA 699a; see also JA 841a-858a. Consequently,

the releases made at Roanoke Rapids Dam are almost entirely dependent on what Kerr makes available.

B. Albemarle-Roanoke Striped Bass

The Albemarle-Roanoke striped bass population, which is a part of the anadromous Atlantic stock, differs from almost all other striped bass populations in that it travels a great distance upstream to spawn. This is because, unlike other river systems, there are no tidal currents in the lower reaches of the Roanoke River to support the semi-buoyant eggs. Spawning Roanoke River striped bass must depend on adequate river flows to keep the eggs from settling to the bottom and dying. JA 1440a.

Spawning occurs each spring in the rapids below Roanoke Rapids Dam about 130 miles from the mouth of the river. Under good conditions, the eggs are carried downstream and hatch before reaching Albemarle Sound at

a location where adequate food (zooplankton) is available for the larvae. SR 11.01.³

The Albemarle-Roanoke stock has experienced a dramatic decline during the last two decades. SR 11.22, 11.24. Congress concluded in 1988 that this particular population "may soon reach a level from which recovery will be exceptionally difficult." P.L. 100-589, §5(a)(2), 102 Stat. 2984. The cause of the decline is complex, multifaceted and not fully understood. Id. Accordingly, Congress commissioned the United States Fish and Wildlife Service to conduct a report on the causes of the decline of the striped bass stock. Id. Subsequently, Congress ordered the Corps to reevaluate the impacts of the proposed project in light of that report. See P.L. 101-640, §413, 104 Stat. 4604, 4651 (1990).

³ "SR" refers to exhibits within the Supplemental Administrative Record, which is on file with the Eastern District of North Carolina.

From 1971 through 1988, the amount of water which the Corps made available for striped bass spawning was governed by a 1971 Memorandum of Understanding between the Corps, VEPCO and the North Carolina Wildlife Resources Commission. JA 443a-450a. To the extent water was available, the Corps would make releases from Kerr Reservoir sufficient to provide a flow of 6,000 cfs downstream of the Roanoke Rapids Dam during the period in which bass were expected to spawn -- the 51 days from April 27 to June 15. JA 451a-470a. However, there was often insufficient water for this purpose. JA 539a.

There had been "concern among several agencies for some time that the existing flow regime during the spawning season has contributed to or even caused the collapse of the Roanoke-Albemarle stock since the late 1970s." JA 1830a. Indeed, as early as 1980, the National Marine Fisheries Service (NMFS) "advised the Corps that current water flow releases on the Roanoke River were adversely impacting the

anadromous striped bass resource" and that "[t]he present flow regime is inadequate to protect striped bass." JA 1376a-1377a. NMFS has repeatedly affirmed this position. Id.

The Roanoke River Water Flow Committee, which includes striped bass experts from federal and state agencies,⁴ concluded that a substantially longer period of augmented flows is necessary to preserve striped bass. The Committee recommended that a new, longer flow regime be adopted "to control the flow of the Roanoke River between

⁴ Both the District Court and the Fourth Circuit made unwarranted, disparaging assertions about the Flow Committee. See 940 F.2d at 62 n.3, 65, infra at 13a-14a n.3, 24a-25a; 731 F. Supp. at 1269, infra at 56a-59a. It is simply not true that petitioners formed the Committee, or that the Corps did not assist the Committee in its work. In fact, the Wilmington District of the Corps was an active participant in the Committee's work and contributed to its report. See JA 1422a-1424a, 1426a, 1429a, 1920a; Stip. 07. Furthermore, the Committee was formed under the aegis of the National Marine Fisheries Service. It is an independent organization with specific expertise in the issues involved in this case. The contrary assertions by the lower courts are mistakenly based on a complaint by the Norfolk District of the Corps, which has no responsibility for flows in the Roanoke River, that it was not made a member. See JA 1418a-1419a.

March 1 to June 30 [122 days] of each year." JA 1422a.⁵ Under this recommendation, target flows would range from 8,500 cfs in March to 5,300 cfs at the end of June. Minimum flows would decrease from 7,543 cfs in March to 3,058 cfs at the end of June. However, the Corps and VEPCO could not provide sufficient water to meet those standards. JA 1423a. Therefore, all parties agreed to a compromise flow regime "curtailed both in time (April 1 to June 15), and in magnitude of low and high flows." Id.

The final version of the compromise flow regime was proposed to the Committee by the Wilmington District in September, 1988. JA 1915a-1930a. The Committee noted that it "remains concerned that [this compromise] flow regime does not adequately address low flow augmentation for striped bass during dry years" JA 1429a.

⁵ The Committee found that both very high flows and very low flows were detrimental to striped bass. Therefore, it proposed "target" flows, and maximum and minimum acceptable flows. Because a 60 mgd withdrawal would have a negative impact during low flow conditions, it is only those conditions that are discussed here.

Nevertheless, because the compromise flow regime was so markedly superior to the prior practice, every agency that made comments to the Committee agreed that the compromise regime should be implemented. JA 1423a.

The Corps and VEPCO were able to maintain flows set by the compromise flow regime for a large portion of the curtailed 1988 spawning period. Preliminary (JA 1423a) and final results from the 1988 spawning season indicated the highest abundance of juvenile bass since 1976, a fact the agencies attributed to the improved flow regime. JA 1368a, 1687a, 1794a.

II. Nature Of The Case And Prior Proceedings

On July 15, 1983, Virginia Beach applied for a Corps permit under 33 U.S.C. §§ 403 and 1344 for the construction of its proposed pipeline. The proposed 60 mgd withdrawn from Lake Gaston would be used by the cities of Virginia Beach (48 mgd), Chesapeake (10 mgd), and

Franklin (1 mgd) and Isle of Wight County (1 mgd). The pipeline would originate at Pea Hill Creek, about 400 yards north of the Virginia-North Carolina state line, and terminate 85 miles east at water lines owned by the City of Norfolk, Virginia.

Following several public hearings, the Norfolk District published a proposed Final Environmental Assessment (EA) and a proposed Finding of No Significant Impact (FONSI) on December 7, 1983. On January 9, 1984, the Corps affirmed its FONSI, published a Statement of Findings (SOF), and issued the permit to Virginia Beach. In those documents, the Corps concluded that the project would not have a significant effect on the environment, that the permit could be issued without preparation of an EIS, and that the project was in the public interest.

Virginia Beach also sought a contract with the Wilmington District to purchase 10,200 acre/feet of storage in Kerr Reservoir. JA 359a-381a. The purpose of the

contract has alternately been described as 1) providing Virginia Beach with water to release downstream if its 60 mgd withdrawal caused the water level in the Roanoke River to fall below minimum permissible levels (WR 1, 42),⁶ and 2) providing water to compensate for flows taken from striped bass during spawning season. JA 1810a, 1819a. The Wilmington District adopted the EA of the Norfolk District and issued its FONSI on January 13, 1984. The contract was approved by the Corps on January 30, 1984. JA 359a-381a.

On January 12, 1984, the State of North Carolina filed this action against the Corps of Engineers in the Eastern District of North Carolina. The Roanoke River Basin Association and twelve counties in North Carolina and Virginia intervened as plaintiffs on June 20, 1984. Virginia

⁶ "WR" refers to exhibits to the Wilmington District Administrative Record. These exhibits are on file with the Eastern District of North Carolina.

Beach was permitted to intervene as a defendant on December 3, 1985.⁷

The amended complaints challenged the Corps' issuance of the pipeline permit and the water supply allocation contract. Plaintiffs alleged that the Corps improperly refused to prepare an EIS prior to issuing the permit and entering the contract, and failed to conduct a proper public interest review. On cross-motions for summary judgment, the District Court considered the certified administrative record as supplemented by the parties, and issued an opinion on July 7, 1987. Although the court affirmed the decision of the Corps in several respects,

⁷ The day the permit was issued (three days before North Carolina sued the Corps), Virginia Beach filed a declaratory judgment suit in the Eastern District of Virginia against the Roanoke River Basin Association, several of its directors and officers, and the Governor of North Carolina, seeking an order declaring that the permit issued for its pipeline project was lawful and valid. On the Governor's appeal of an interlocutory order regarding personal jurisdiction, the Fourth Circuit ruled that the Virginia Beach action must be dismissed or transferred to the Eastern District of North Carolina. City of Virginia Beach v. Roanoke River Basin Association, 776 F.2d 484, 489 (4th Cir. 1985). That action was transferred on November 14, 1985, and then dismissed as duplicative on December 17, 1985.

it found that the Corps arbitrarily analyzed the potential environmental effects of the project on striped bass, and also arbitrarily conducted its public interest review regarding the extent of Virginia Beach's need for water. The court directed the Corps to:

1. As a part of its NEPA review make an independent assessment of the effects of the proposed project on striped bass to determine whether the preparation of an EIS is required or whether any mitigative measures are necessary; and,
2. As a part of its public interest review make a determination of the extent of Virginia Beach's water needs.

665 F. Supp. at 450, infra at 152a. The District Court retained jurisdiction to review the Corps' further analysis.

On June 6, 1988, the Norfolk District distributed for comment a draft Supplement[al] Environmental Assessment (SEA) and a Revised Finding of No Significant Impact (RFONSI), which again concluded that the proposed project would not have a significant impact on striped bass and that

an EIS was not required. JA 1065a-1081a. On July 7, 1988, the Wilmington District adopted the striped bass portions of the Norfolk draft SEA and published its own draft RFONSI. JA 1093a-1096a.

In making its decisions, the Corps relied heavily upon computer modeling done by its Wilmington District. See JA 1805a-1848a. The Corps did not disclose at least two important documents containing critical staff analyses of this modeling until after its final decision. JA 1675a, 1857a. The first document was an October 5, 1988 memorandum which the Corps has contended provided a complete analytical defense to plaintiffs' criticisms of the Corps' model. JA 1675a. That memorandum contained substantial new information never previously available to the public. This included discussion of a "preliminary determination" that overall the compromise flow regime would be more easily maintained than the prior regime. The second document was the "preliminary determination" itself, which

was initially prepared by the Corps' Wilmington District in 1988, but never made publicly available or referred to in the SEA or any documents circulated for comment. JA 1857a. These were two principal documents on which the SSOF and RFONSI were based. JA 1836a, 1837a. The State of North Carolina, the Roanoke River Basin Association, and the rest of the interested public never had the opportunity to comment on this vital information.

Despite being deprived of crucial information, state and federal agencies with striped bass expertise, independent fisheries biologists, the parties and others submitted extensive, critical comments.⁸ Each of the resource agencies advised the Corps that the probable impact on striped bass would be significant and that an EIS should be

⁸ See JA 1375a-1390a, 1393a-1406a, 1413a-1416a, 1433a-1446a, 1459a-1468a, 1477a-1528a, 1421a-1431a, 1615a-1620a, 1645a-1646a, 1647a-1648a, 1675a-1680a, 1915a-1919a; SR 115, 117.

prepared. For example, the U.S. Fish and Wildlife Service (USFWS) stated:

"In view of the significance of the impacts identified regarding the proposed activities, i.e., reallocation of the water supply in Kerr Reservoir and withdrawal of 60 mgd from the Roanoke system, the Service believes that the preparation of an Environmental Impact Statement is appropriate." JA 1462a.

The National Marine Fisheries Service (NMFS) wrote:

"Considering these recommended changes in water flow management, the City of Virginia Beach's project is a high risk proposal. It should not be permitted without a full scale Environmental Impact Statement, examining its effects on striped bass under the enhanced augmented flow regime in light of all other factors affecting the system." JA 1386a.

The North Carolina Wildlife Resources Commission said:

"We believe removal of 60 mgd is likely to cause severe damage to striped bass in the Roanoke River. The Corps' tentative conclusions to the contrary are not scientifically supportable." JA 1416a.

The North Carolina Division of Marine Fisheries advised:

"The Division of Marine Fisheries (DMF) strongly objects to withdrawal of 60 million gallons per day ("mgd") of water from Lake Gaston for Virginia Beach's use. A full Environmental Impact Statement (EIS) is essential and necessary to fully and

adequately address numerous impacts of any withdrawal from the basin on down stream uses, in particular year round maintenance of the striped bass population

"The preparation of an Environmental Impact Statement (EIS) is absolutely necessary to properly address the existing, proposed, and cumulative impacts of water withdrawal on striped bass life history in the Roanoke River." JA 1363a-1364a.

The agencies with striped bass expertise concluded that an EIS was necessary because river flow is a crucial factor affecting the Albemarle-Roanoke stock, and that even under current conditions insufficient water is available. The NMFS

"conclude[d] that enhanced river flow is extremely important to the survival of the striped bass population in the Roanoke River." JA 1375a.

The USFWS concluded

"that flows may be more significant in determining reproductive success than other factors." JA 1462a.

The North Carolina Wildlife Resources Commission noted that

"adequate river flow is essential to the survival of striped bass. We believe removal of 60 mgd is likely to cause severe damage to striped bass in the Roanoke River." JA 1416a.

The North Carolina Division of Marine Fisheries concluded that

"the primary problem with the striped bass population is Roanoke River flow (due to the operation of the dams) and the resulting water quality is causing high mortalities in the larval population

"Division of Marine Fisheries scientists are concerned that increasing the frequency and duration of minimum flow would not only impact the actual act of spawning, but also affect overall reproduction and recruitment." JA 1365a-1366a.

The Roanoke River Flow Committee, which consists of representatives of these agencies and university fisheries biologists (JA 1920a), advised the Corps that

"river flow has a major impact upon the success of the striped bass in spawning and on subsequent life history stages. . . .

"The Committee concludes that the quantity of water passing through the Roanoke River system between March and June of each year has a significant effect on striped bass and other natural resources downstream." JA 1422a, 1424a.

In sum, all commenting agencies with expertise in fisheries found that river flow was crucial to Albemarle-Roanoke striped bass (JA 1375a-1390a, 1413a-1416a, 1433a-1446a, 1459a-1468a); that additional water was needed for bass survival (JA 1375a-1390a, 1413a-1416a, 1433a-1446a, 1459a-1468a); that when water was released in accordance with the compromise flow regime, striped bass showed substantial improvement (JA 1375a-1390a, 1413a-1416a, 1433a-1446a, 1459a-1468a); and that an EIS must be prepared before the Corps permitted the 60 mgd withdrawal (JA 1375a-1390a, 1413a-1416a, 1433a-1446a, 1459a-1468a).

Despite these strong, uniformly critical comments, the Norfolk District on December 21, 1988 issued a final SEA (JA 1805a-1828a) identical to the draft SEA it had circulated for comment in June, a final RFONSI (JA 1847a-1848a), and a Supplemental Statement of Findings (SSOF) (JA 1828a-1846a). On December 23, 1988, the Wilmington District adopted the Norfolk SEA and issued its own RFONSI. JA

1851a-1854a. In January 1989, each district issued revised documents, acknowledging errors in the earlier documents, but changing no conclusions. JA 1849a-1850a, 1855a-1856a.

Despite the fact that the Corps' findings were so strongly questioned by the expert resource agencies, the District Court ruled on February 2, 1990 that the Corps was not required by NEPA to prepare an EIS prior to allowing the 60 mgd water withdrawal, and that the Corps' public interest review had not been conducted in an arbitrary manner. North Carolina's motion for reconsideration was denied on March 1, 1990. Notices of appeal to the Court of Appeals followed on April 2 and 3, 1990.

The Court of Appeals affirmed the District Court's holding that the Corps could refuse to prepare an EIS. The Court of Appeals summarily rejected each of petitioners' arguments, stating that because the Corps considered each of the issues raised by petitioners, "no more is required." 940 F.2d at 64, infra at 20a. After receiving petitioners' Petition

for Rehearing and Suggestion for Rehearing En Banc and requiring respondents to submit a reply, the Court of Appeals denied reconsideration on August 20, 1991.

REASONS FOR GRANTING THE WRIT

The Court of Appeals decision is in conflict with a principle established by this Court that an agency must make critical information on which it relies available to the public before it reaches a final decision. It is also contrary to decisions of other courts of appeals regarding the obligation of an agency to explain its computer modeling once substantial questions as to its validity have been raised.

The opinion below is in error, and in conflict with decisions of other courts of appeals, regarding application of NEPA. The opinion below demonstrates a mistaken view of the purposes and requirements of the National Environmental Policy Act -- a view that could frustrate congressional intent in a wide range of future NEPA cases in the Fourth Circuit.

This case is important because of the stakes involved, but it also demonstrates the continuing confusion and conflict over when an EIS is required under NEPA, despite this Court's recent decisions involving that Act. Until this Court provides further guidance on the questions presented in this case, federal agencies will continue to confront inconsistent judicial interpretations of NEPA's language in deciding issues of substantial national interest involving policies and programs intended to be implemented nationwide.

The Fourth Circuit has interpreted quite differently than other courts of appeals NEPA's test for determining when a proposed action "significantly affect[s] the human environment." Its decision regarding the circumstances in which a mitigation condition will eliminate an otherwise potentially significant impact is also directly contrary to decisions of other courts of appeals. There is also conflict between the Fourth Circuit and other courts of appeals over the meaning and effect of the Council on Environmental

Quality's implementing NEPA regulations as they apply to impacts that are likely to be controversial, uncertain and cumulative.

I. The Opinion Below Is In Error And In Conflict With Decisions Of The Ninth Circuit Regarding The Need To Explain Specifically How Mitigation Will Eliminate Potentially Significant Environmental Impacts.

The Court of Appeals concluded that the Corps had not acted arbitrarily or unlawfully in declining to prepare an EIS because of the mitigation condition imposed by the Corps. The Court of Appeals reached this conclusion even though the Corps did not make its mitigation condition available for public comment and never explained specifically how the condition would mitigate the impact of the project. The opinion below is in conflict with the holding of the Ninth Circuit that when an agency intends to rely on mitigation to justify a finding of no significant impact, it "must explain exactly how the measures will mitigate the

project's impact." LaFlamme v. FERC, 852 F.2d 389, 399-400 (1988); see also Jones v. Gordon, 792 F.2d 821, 829 (9th Cir. 1986); Steamboaters v. FERC, 759 F.2d 1382, 1393, reh. denied, 777 F.2d 1384 (9th Cir. 1985)("FERC fails to explain specifically how the conditions would mitigate the impact of the project").⁹

The parties agreed below that "[t]he effectiveness of the mitigation condition is the single most important issue in this case." Br. at 14; petitioners' reply brief at 3. The Corps contended, and the Court of Appeals concurred, that the mitigation condition "completely compensat[es]" for the City's 60 mgd withdrawal. JA 1838a; see 940 F.2d at 63-64, infra at 15a-20a. Yet, the respondents conceded below

⁹ The discussion of mitigation in Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989) was in the context of a challenge to the adequacy of an EIS, as opposed to a decision -- as here -- not to prepare an EIS on the grounds that a mitigation condition eliminates a project's adverse environmental impacts. Nevertheless, the requirement is the same in both situations "that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated. . . ." Id. at 352.

that the City lacked storage sufficient to provide releases during striped bass spawning periods "by an amount equal to the planned withdrawal." Br. at 19 n.11. The conclusion that the mitigation condition completely compensates for the withdrawals, then, is plainly wrong.

The Corps never described any mitigation plan in either its draft or final documents. Indeed, as the NMFS and USFWS advised the Corps after the final decision was made:

"NMFS has seen brief reference to mitigation in two documents, the [SSOF] and the [Norfolk FONSI]. No details were given, and NMFS could not evaluate the effectiveness of mitigation." JA 139a.

"[FWS] could not have directed specific comments toward mitigation because the FWS was never provided a specific description of the mitigation plan by the Corps of Engineers." JA 145a.

In short, neither the parties nor the striped bass experts had an opportunity to comment on what the Corps later described as its "most important finding." JA 1850a.

Yet, remarkably, the RFONSI found that the USFWS and NMFS have

"never taken issue with the Wilmington District's model and there is no reason to assume that they would find the model results regarding the effectiveness of the flow mitigation permit condition to be controversial." JA 1849a-1850a.

After the Corps had issued the permit and announced its mitigation condition, NMFS commented:

"The offer by the City of Virginia Beach to use its storage is not considered a complete mitigation plan." JA 140a.

"Lacking a full analysis, we do not consider this offer to be a mitigation plan." JA 141a.

At no point has the Corps demonstrated specifically how the City's storage would be utilized to eliminate the project's impacts. The mitigation condition simply states a conclusion that the Virginia Beach storage must be used "to not cause the loss of any augmented spawning flow days which would otherwise be caused by the City's withdrawal." JA 1838a. Nowhere in the record is there any detailed

explanation of the manner in which that result will be accomplished or whether the City actually has sufficient storage to assure that result. In fact, the Corps has elsewhere indicated that such flows will not occur. According to the Corps, "Virginia Beach will not be withdrawing water from its storage in Kerr Reservoir during February through June." JA 1679a. The Corps also advised that "[a]t no time will water be released from Kerr exclusively for withdrawal by the City" (JA 336a) and "that no water is to be released from Kerr for benefit of Virginia Beach during droughts . . . until Kerr Reservoir is at the bottom of the power pool (presently at 293 m.s.l.)." (Stip. 30; see also JA 1755a-1757a).

In light of the vagueness of the mitigation condition and the continuing uncertainty about the ability of the City to provide sufficient storage to meet that condition, it was error to hold that the "mitigation condition is adequate to

address any possible environmental effects of the pipeline."

940 F.2d at 63, infra at 15a.¹⁰

II. The Opinion Below Is In Error And In Conflict With The Rule Adopted By This Court That Critical Information On Which The Agency Relies Must Be Made Available For Review And Comment Before The Agency Makes Its Decision.

Closely related to the issue of whether the Corps must explicate specifically how its mitigation condition will eliminate an otherwise potentially significant environmental impact is the issue of whether the Corps was obligated to

¹⁰ One indication of the failure of the Court of Appeals to conduct a searching investigation of the record is its conclusion that commentators never raised the issue that reductions in flow on already lost days are of concern. 940 F.2d at 63-64, infra at 18a. This ignores the comment of the North Carolina Division of Marine Fisheries that:

[e]ven if conditions during a particular year were such that no days of spawning flows were entirely lost, flows would nevertheless be reduced throughout the spawning period. There is already insufficient water in the system to provide reasonable spawning conditions, and given the fragile condition of the bass population, any loss of water could have an extremely significant impact.

JA 831a; see also JA 222a, 226a.

make available two critical documents on which the Corps ultimately relied to justify its model and modeling assumptions. Indeed, the Corps relied on the absence of comment on "modeling results regarding the effectiveness of the flow mitigation permit condition" as proof that the issue was not controversial. JA 1849a-1850a.

As noted above, the Corps shielded crucial modeling information until after it published its final decision. The Corps did not disclose at least two important documents containing critical staff analyses. JA 1675a, 1857a. The first document was a October 5, 1988 memorandum which the Corps has alleged provided an analytical defense to plaintiffs' criticisms of the Corps' model. JA 1675a. That memorandum contained substantial new information never previously available to the public, including discussion of a "preliminary determination" that overall the compromise flow regime would be more easily maintained than the old. The second document was the "preliminary determination" itself,

which was initially prepared by the Corps' Wilmington District in 1988, but never made publicly available or referred to in the SEA or any documents circulated for comment. JA 1857a. Because the Corps refused to disclose these documents, the public never had the opportunity to comment on this vital information.

The Court of Appeals did not dispute that the Corps failed to disclose vital information. Rather, it summarily dismissed petitioners' argument by asserting that petitioners did not explain how they were harmed by this shielding of vital information, and that the court was "satisfied that the [petitioners] were not prejudiced by any slowness or incompleteness in the Corps' disclosure of modeling information." 940 F.2d at 65, infra at 25a. This holding squarely conflicts with decisions of this Court, the express provisions of NEPA and the binding Council on Environmental Quality (CEQ) regulations.

This Court has held that the shielding of information from public review is alone sufficient to invalidate agency action. Bowman Transportation, Inc. v. Arkansas-Best Freight System, Inc., 419 U.S. 281, 288 n.4 (1974).¹¹ In a recent case, this Court held that the principle established in Bowman Transportation did not apply to an action brought under the Employee Retirement Income Security Act of 1974 ("ERISA"). Pension Benefit Guaranty Corp. v. LTV Corp., 110 S. Ct. 2668, 2679-81 (1990). The holding in Pension Benefit was based on the fact that neither ERISA nor the Administrative Procedure Act specifically provided the public

¹¹ This principle has been implemented by several other federal courts, including previous panels of the Fourth Circuit. See, e.g., North Carolina Environmental Policy Institute v. EPA, 881 F.2d 1250, 1258 (4th Cir. 1989); McLouth Steel Prod. Corp. v. Thomas, 838 F.2d 1317, 1323-24 (D.C. Cir. 1988); South Carolina ex rel. Tindall v. Block, 717 F.2d 874, 885 (4th Cir. 1983), cert. denied, 465 U.S. 1080 (1984); Sierra Club v. Costle, 657 F.2d 298, 333 (D.C. Cir. 1981); U.S. Lines, Inc. v. Federal Maritime Comm'n, 584 F.2d 519, 540 (D.C. Cir. 1978); Ely v. Velde, 451 F.2d 1130, 1138-39 (4th Cir. 1971); National Wildlife Federation v. Marsh, 568 F. Supp. 985, 993-94 (D.D.C. 1983).

the procedural right to access to all relevant information. Id. at 2680.

By contrast, one of the fundamental purposes of NEPA is to ensure that the public is fully apprised of the potential environmental effects of major federal actions before they are finalized. As this Court has stated:

NEPA promotes its sweeping commitment to "prevent or eliminate damage to the environment and biosphere" by focusing Government and public attention on the environmental effects of proposed agency action. 42 USC § 4321. By so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct. . . . Similarly, the broad dissemination of information mandated by NEPA permits the public and other government agencies to react to the effects of a proposed action at a meaningful time.

Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989) (citations omitted, emphasis added).¹²

¹² See also Sierra Club v. Morton, 510 F.2d 813, 820 (5th Cir. 1975) (NEPA "serves as an environmental full disclosure law") (quoting Silva v. Lynn, 482 F.2d 1282, 1284-85 (1st Cir. 1973)).

The CEQ regulations which implement NEPA similarly provide:

NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. . . . Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

* * *

Agencies shall . . . [p]rovide . . . the availability of environmental documents so as to inform those persons and agencies who may be interested or affected.

40 C.F.R. §§ 1500.1(b) & 1506.6(b). These CEQ regulations are binding on all federal agencies and must be given substantial deference by reviewing courts. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 352-55 (1989); see also 40 C.F.R. § 1507.1. Finally, the Corps' own regulations state:

The [public] notice should include . . . [a]ny . . . available information which may assist interested parties in evaluating the likely

impact of the proposed activity . . . on factors affecting the public interest.

33 C.F.R. § 325.3(a)(13).

By holding that the Corps' failure to disclose information was of no consequence, the Court of Appeals ignored the clear language of these binding regulations and this Court's opinion in Oregon Natural Resources. This Court should grant the writ to decide that, in light of the express disclosure requirements provided by NEPA and the binding CEQ regulations, the holding in Pension Benefit does not apply to NEPA cases.¹³

¹³ In another NEPA case, the District Court for the District of Columbia invalidated a Corps permit for failure to disclose a document on which it relied. National Wildlife Federation v. Marsh, 568 F. Supp. 985, 991-98 (1983); see also Grazing Fields Farm v. Goldschmidt, 626 F.2d 1068, 1072-74 (1st Cir. 1980) (holding that an EIS was inadequate because information was not made available for public review and comment).

III. The Opinion Below Is In Error And In Conflict With Decisions Of The District Of Columbia Circuit Requiring Agencies to Provide A Complete Analytical Defense Of Modeling Which Has Been Challenged.

The opinion below conflicts with decisions of the Court of Appeals for the District of Columbia Circuit which establish that an agency may rely on a model only if the agency provides a complete analytical defense of the model and its assumptions.¹⁴

Surprisingly, the opinion below also departs without explanation from the prior view of the Court of Appeals that

a federal agency obligated to take into account the values . . . NEPA seek[s] to safeguard, may not evade that obligation by keeping its thought processes under wraps To enable a court to ascertain whether there has been a genuine, not a perfunctory compliance

¹⁴ Natural Resources Defense Council, Inc. v. Herrington, 768 F.2d 1355, 1420-22 (D.C. Cir. 1985); Eagle-Picher Industries v. U.S. EPA, 759 F.2d 905, 921-22 (D.C. Cir. 1985); Small Refiner Lead Phase-Down Task Force v. U.S. EPA, 705 F.2d 506, 535 (D.C. Cir. 1983); Sierra Club v. Costle, 657 F.2d 298, 332-33 (D.C. Cir. 1981); Alabama Power Co. v. Costle, 636 F.2d 323, 387-88 (D.C. Cir. 1979); American Public Gas Ass'n v. Federal Power Comm'n, 567 F.2d 1016, 1039 (D.C. Cir. 1977), cert. denied, 435 U.S. 907 (1978).

with NEPA, the [agency] will be required to explicate fully its course of inquiry, its analysis, and its reasoning.

Ely v. Velde, 451 F.2d 1130, 1138-39 (4th Cir. 1971).

The Corps simply has not met its burden of completely defending its model, even though the lengthy model itself was made a part of the record. JA 1934a-1961a. The Corps has conceded that the model is not self-explanatory. JA 623a. Although some modeling assumptions are evident in the model code and others are explained in documents never made available to the public before the final decision (JA 1675a, 1857a), several critical assumptions have never been explained. For example, the Corps has never explained how it incorporated the Virginia Beach water supply storage in its modeling or how the use of that storage was modeled.

The Court of Appeals concluded that the petitioners were not prejudiced by the failure of the Corps to provide a complete defense of its computer model. The opinion says

that the petitioners "have not explained what use they expect to make of [this information]." 940 F.2d at 65, infra at 24a. Requiring petitioners to demonstrate precisely how undisclosed information would have been used is unjustified as a matter of law and fact, and is in conflict with the decisions of other courts of appeals.

In Small Refiner Lead Phase-Down Task Force v. U.S. EPA, 705 F.2d 506, 540-41 (D.C. Cir. 1983), for example, the court held that where an agency provides no opportunity to reply to its late evidence, such evidence cannot be relied on by the agency to support its action without the need for any showing by plaintiffs of prejudice. Here, however, petitioners have had no opportunity to comment on some modeling assumptions because they were identified only after the Corps revealed its decision and other modeling assumptions because they have never been disclosed at all.

The holding below that the petitioners were not prejudiced is also clearly contrary to the record. First, as noted above, certain critical information has never been provided to the petitioners and the reviewing courts. How can a party show what use it would make of information it has never seen? Second, based on information obtained after the Corps' decision, the petitioners and two federal agencies showed that the mitigation condition would not eliminate the adverse environmental effects of the withdrawals.¹⁵ Their failure to raise that point before the decision was reached was the result of the Corps' failure to explain its modeling and mitigation condition fully, and to provide the public an opportunity to comment. What greater or more obvious showing of prejudice could be made?

¹⁵ The Court of Appeals clearly misconstrued the nature of the controversy, which was never confined to the potential loss of a day of augmented spawning flows, but rather went to the net reduction in water for spawning flows where admittedly there are already inadequate flows. JA 831a.

IV. The Opinion Below Is In Error And In Conflict With Decisions Of Other Courts of Appeals Implementing The CEQ Regulations Which Govern Whether An EIS Must Be Prepared.

NEPA requires all federal agencies to prepare an EIS for any "major Federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332. "Significantly" as used in NEPA requires considerations of both context and intensity. 40 C.F.R. § 1508.27. "Intensity" is defined by regulation as the "severity of the impact." 40 C.F.R. § 1508.27(b). In order to determine the severity of the impact, the Corps was required to evaluate ten specific factors listed in that regulation, three of which were particularly relevant to this case:

(4) The degree to which the possible effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.

"Affecting" means will or may have an effect on. 40 C.F.R.

§ 1508.3. The Corps need not determine that the impact will be significant. The courts of appeals have uniformly determined that an agency must prepare an EIS if the impact of an action may be significant.¹⁶

Given the substantial expert opinion that the project may adversely affect the environment, particularly the already stressed striped bass stock, the Corps was required to prepare an EIS in this case.

¹⁶ Louisiana ex rel. Guste v. Lee, 853 F.2d 1219, 1222-23 (5th Cir. 1988)(Wisdom, J.); Sierra Club v. U.S. Forest Service, 843 F.2d 1190, 1193 (9th Cir. 1988); Quinonez-Lopez v. Coco Lagoon Development Corp., 733 F.2d 1, 2 (1st Cir. 1984); Sierra Club v. Peterson, 717 F.2d 1409, 1413-14 (D.C. Cir. 1983); Township of Lower Alloways Creek v. Public Service Electric & Gas Co., 687 F.2d 732, 742 (3d Cir. 1982); Minnesota Public Interest Research Group v. Butz, 498 F.2d 1314, 1320 (8th Cir. 1974); Hanly v. Kleindienst, 471 F.2d 823, 831 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973).

**A. Controversy –
40 C.F.R. § 1508.27(b)(4)**

The binding CEQ regulations required the Corps to consider the degree to which the possible effects on striped bass are likely to be highly controversial. 40 C.F.R. §1508.27(b)(4). The Court of Appeals' decision concerning the Corps' finding that this case is not controversial should be reviewed by this Court for at least three reasons.

First, the opinion below is in direct conflict with the clear language of this regulation and with decisions of the Court of Appeals for the Ninth Circuit. The Ninth Circuit has interpreted this CEQ regulation to require an agency to prepare an EIS where commenting public agencies and others with expertise in the subject matter conclude that there may be a significant impact on the environment.¹⁷

¹⁷ See, e.g., LaFlamme v. FERC, 852 F.2d 389, 401 (9th Cir. 1988) (public comments about the effect the project would have on the area necessitated an EIS); Sierra Club v. U.S. Forest Service, 843 F.2d 1190, 1193 (9th Cir. 1988) (EIS required where affidavits and testimony of conservationists, biologists, and other experts were highly critical of
(continued...)

The Corps' views have been strenuously criticized by the expert agencies. As explained above, the U.S. Fish and Wildlife Service (JA 1459a-1468a), the National Marine Fisheries Service (JA 1375a-1389a), the North Carolina Wildlife Resources Commission (JA 1413a-1416a), the North Carolina Division of Marine Fisheries (JA 1363a-1374a), and the Roanoke River Flow Committee (JA 1421a-1431a)¹⁸ provided many explicit and detailed reasons why, contrary to the Corps' view, the project may have significant environmental impact.¹⁹ By allowing the Corps to

¹⁷(...continued)

the EAs); Jones v. Gordon, 792 F.2d 821, 828-29 (9th Cir. 1986) (agency cannot avoid EIS by simply disputing public comments regarding the potential environmental consequences of a project); Foundation for North American Wild Sheep v. U.S. Dept. of Agriculture, 681 F.2d 1172, 1182 (9th Cir. 1982) (EIS required where agency "received numerous responses from conservationists, biologists, and other knowledgeable individuals, all highly critical of the EA").

¹⁸ See also the comments of Professor Roger Rulifson of East Carolina University (JA 1433a-1458a).

¹⁹ See n.15, supra at 41. In fact, the issue of what flows are needed for striped bass in the Roanoke River has been controversial since the first impoundment was built in the 1950s. JA 504a.

summarily dismiss these substantial expert views rather than prepare an EIS to fully assess them, the opinion below creates a clear conflict with prior decisions of the Ninth Circuit.

Second, the opinion below is also in conflict with a decision of the Ninth Circuit that the requirement to prepare an EIS is not eliminated so long as substantial questions remain regarding the effectiveness of the mitigation condition. Conner v. Burford, 848 F.2d 1441, 1450 (1988), cert. denied, 489 U.S. 1012 (1989). That there is a substantial controversy over the effectiveness of the mitigation is obvious. JA 114a-115a, 139a-42a. Contrary to the statement by the Corps in its SSQF (JA 1838a), the mitigation condition would not compensate completely for the City's withdrawals, as respondents now concede. Br. at 19 n.11. Because flows would be affected even with the use of the City's storage, the Corps was obliged, as NMFS and USFWS urged, to conduct a cumulative impact analysis of

this remaining impact together with all past, present and reasonably foreseeable conditions affecting the same resource before deciding whether an EIS was required. See infra at 52-54. The Corps failed to do so here.

Third, the opinion below also creates a conflict with a decision of the Court of Appeals for the District of Columbia that preparation of an EIS is particularly important when public controversy over the effects of the project are coupled with congressional investigation of the matter under consideration. Foundation on Economic Trends v. Heckler, 587 F. Supp. 753, 756 (D.D.C. 1984), aff'd in part, vacated in part on other grounds, 756 F.2d 143 (D.C. Cir. 1985). Congress found in 1988 that

the striped bass and the aquatic environment of the Albemarle Sound-Roanoke River basin presently are being significantly affected by combined but not fully understood causes. . . .

P.L. 100-589, §5(a)(5), 102 Stat. 2984, 2985, 16 U.S.C. §1851 note. Accordingly, Congress required the Corps to

reevaluate the impacts of the proposed pipeline in light of a study to be completed by the U.S. Fish and Wildlife Service later this year. See P.L. 101-640, §413, 104 Stat. 4604, 4651 (1990). These actions by Congress, coupled with the substantial expert opinion that the project may have adverse environmental impacts, demonstrate that the level of controversy is such that an EIS must be prepared.

The Court of Appeals nevertheless dismissed the above arguments by saying:

The Corps of Engineers should consider the comments of other agencies, but it need not defer to them when it disagrees. The Corps addressed the specific comments of the other agencies, and explained why it found them unpersuasive. No more is required.

940 F.2d at 64, infra at 20a. This view demonstrates a fundamental misunderstanding of the purpose of NEPA, the function of an EIS and the requirements of 40 C.F.R. §1508.27(b)(4). As implemented by the CEQ regulations, NEPA requires federal agencies to prepare an EIS when

faced with substantial conflicting opinions from experts. NEPA's objective would be frustrated if agencies were allowed to disregard opposing opinions before conducting the more rigorous investigation and analysis involved in the preparation of an EIS.²⁰

**B. Uncertainty --
 40 C.F.R. § 1508.27(b)(5)**

The CEQ regulations also mandate consideration of the degree to which the effects of the proposed withdrawals are "highly uncertain or involve unique or unknown risks." 40 C.F.R. § 1508.27(b)(5). Applying this regulation, other courts of appeals have held that an agency faced with such

²⁰ Compare Sierra Club v. U.S. Forest Service, 843 F.2d 1190, 1193 (9th Cir. 1988) (expert comments disputing an agency's conclusion that there will be no significant impact establish "precisely the type of 'controversial' action for which an EIS must be prepared") with Webb v. Gorsuch, 699 F.2d 157, 160 (4th Cir. 1983) ("conflicting expert opinion . . . is for the administrative agency and not the courts to resolve"). Both cases involved agency decisions not to prepare an EIS; the latter fails to recognize the distinction between expert disputes while an EIS is being prepared where the agency must resolve the conflict, and expert disputes at the stage where the agency decides whether to prepare an EIS and where it must apply the CEQ controversy test under 40 C.F.R. §1508.27(b)(4).

uncertainty must prepare an EIS. See U.S. Forest Service, 843 at 1194; Jones v. Gordon, 792 F.2d 821, 829 (9th Cir. 1986); Foundation on Economic Trends v. Heckler, 756 F.2d 143, 153-54 (D.C. Cir. 1985); Foundation for North American Wild Sheep v. U.S. Dept. of Agriculture, 681 F.2d 1172, 1182 n.47 (9th Cir. 1982).

The Corps recognized the uncertainty involved here. JA 1813a, 1823a, 1838a. So did the District Court. 731 F. Supp. at 1272, infra at 68a-69a (whether there will be dire consequences in the event of a severe drought "remains to be seen").

The extensive expert comments which questioned the Corps' views also demonstrate that the effects of this project are highly uncertain. Moreover, the Court of Appeals overlooked the important fact that Congress found that the striped bass stock is being significantly affected by unknown causes, and that the proposed pipeline project should be reassessed after the Fish and Wildlife Service completes its

striped bass study later this year. P.L. 100-589, §5, 16 U.S.C. §1851 note (1988); P.L. 101-640, §413, 104 Stat. 4604, 4651 (1990). Congress would not have enacted such legislation if it believed that the effects of this project were certain. These acts of Congress, coupled with the comments of the experts reflecting the controversy over the effects of the project, demonstrate that the level of uncertainty required the Corps to prepare an EIS.²¹ The opinion below is in conflict with this binding CEQ regulation and with the decision of other courts of appeals applying it.

²¹ The Court of Appeals stated that the commentors did not provide enough "evidence" or "information" to support their views about the potential environmental impacts of the proposed pipeline project. 940 F.2d at 63-64, *infra* at 15a. Aside from the fact that this view ignores the extensive data and analyses submitted by commentors (see, e.g., JA 831a, 1363a-1389a, 1393a-1397a, 1413a-1416a, 1421a-1431a, 1433a-1468a, 1477a-1515a, 1537a-1540a, 1603a-1609a, 1915a-1919a) and the congressional findings on this matter, it also overlooks the fact that the impact of the project has not yet occurred. It is difficult to perceive what further "evidence" of significant impacts the commentors were required to offer. Both the Corps and the experts who disagreed with the Corps necessarily made informed predictions based upon their expertise in an area of unusual complexity, controversy and uncertainty.

**C. Cumulative Impacts --
40 C.F.R. §§ 1508.7
& 1508.27(b)(7)**

The application by the Court of Appeals of the CEQ regulation requiring agencies to consider cumulative effects [40 C.F.R. §§ 1508.7 & 1508.27(b)(7)] before deciding whether to prepare an EIS is in conflict with decisions of other courts of appeals. The Court of Appeals held that the Corps had discharged its duty in this respect by finding that 1) "the small effect of the City's project on stream flows should not have any significant effect on striped bass," and 2) "any improvement in environmental conditions would be [un]likely to improve the striped bass population." 940 F.2d at 65, infra at 23a.

In Hanly v. Kleindienst, 471 F.2d 823, 831 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973), the court ruled that an agency must consider whether "even a slight increase in adverse conditions that form an existing environmental milieu may [be] significant." The Fifth Circuit in Fritiofson

v. Alexander held that an agency must consider "the overall impact that can be expected if individual impacts are allowed to accumulate" before deciding whether an EIS is required. 772 F.2d 1225, 1245 (1985)(emphasis added). In LaFlamme v. FERC, the Ninth Circuit held that the CEQ regulations prohibit evaluation of a project's impacts in isolation, and require an analysis of the net impact that all existing and reasonably foreseeable conditions may have on a basin's resources, before a decision not to prepare an EIS can be justified. 852 F.2d 389, 402 (1988).

In this case, the Corps merely recited that several factors (including flows, overfishing and water quality) may affect striped bass. It concluded that "overfishing probably was the principal reason for the collapse of this fishery." JA 1835a. Nevertheless, it found that the withdrawals could affect striped bass if 1) there is a continuous relationship between flow and striped bass recruitment and 2) overfishing is stopped. Id.

Despite acknowledging that the withdrawals might have an adverse effect on striped bass in the future, the Corps made no effort to conduct a cumulative impact analysis as mandated by 40 C.F.R. § 1508.27(b)(7) to determine the overall impact of the proposed withdrawals (even though they might be insignificant in themselves) when added to all existing and reasonably foreseeable conditions affecting striped bass.²² Instead, it relied entirely on its mitigation condition to obviate the need for such analysis. JA 1835a-1838a.

²² In approving this narrow view of the cumulative impact analysis requirement, the Court of Appeals was clearly following its earlier decisions on the issue. Gee v. Hudson, 746 F.2d 1471, 22 ERC 1213 (4th Cir. 1984) (Table No. 84-1172), cert. denied, 471 U.S. 1058 (1985) (White, Brennan & Marshall, JJ., dissenting); Webb v. Gorsuch, 699 F.2d 157, 161 (4th Cir. 1983).

CONCLUSION

Seldom does a single opinion reach as many conclusions that are in conflict with principles established by this Court or with decisions of other courts of appeals as does the opinion below. This case involves a matter of great importance to Virginia and North Carolina -- the future use of a substantial amount of water from an interstate water system. More important, however, is the need for this Court to address the unresolved conflicts over NEPA issues raised by this case, as well as the unresolved conflict over the obligation of federal agencies to make information available to the public for review and comment before they reach final decisions. The lower courts will continue to be in disarray over these issues until such resolution occurs. This case presents an excellent vehicle for that purpose. A writ of certiorari should be granted.

Respectfully submitted,

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DATED: November 18, 1991



APPENDIX A

**UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT**

ROANOKE RIVER BASIN ASSOCIATION,

Plaintiff-Appellant,

and

**STATE OF NORTH CAROLINA;
COUNTIES OF BERTIE, GRANVILLE,
HALIFAX, MARTIN, NORTHAMPTON,
VANCE, WARREN & WASHINGTON,
NORTH CAROLINA; COUNTIES OF
CHARLOTTE, HALIFAX & MECKLENBURG,
VIRGINIA,**

Plaintiffs.

v.

No. 90-3049

**RONALD E. HUDSON, in his
official capacity as Norfolk
District Engineer; WAYNE A. HANSON,
in his official capacity as
Wilmington District Engineer;
JOSEPH K. BRATTON, LT. GEN., in his
official capacity as the Chief of
Engineers of the U.S. Army Corps of
Engineers; WILLIAM R. GIANELLI,
in his official capacity as Asst.
Secretary of the U.S. Dept. of the
Army; JOHN O. MARSH, in his official
capacity as the Secretary of the U.S.
Dept. of the Army; THE CITY OF**

VIRGINIA BEACH,

Defendants-Appellees.

NATIONAL WILDLIFE FEDERATION; NORTH
CAROLINA WILDLIFE FEDERATION,

Amici Curiae.

STATE OF NORTH CAROLINA,

Plaintiff-Appellant,

and

COUNTIES OF BERTIE, GRANVILLE,
HALIFAX, MARTIN, NORTHAMPTON,
VANCE, WARREN & WASHINGTON,
NORTH CAROLINA; ROANOKE RIVER
BASIN ASSOCIATION; COUNTIES OF
CHARLOTTE, HALIFAX & MECKLENBURG,
VIRGINIA,

Plaintiffs.

v.

No. 90-3050

RONALD E. HUDSON, in his
official capacity as Norfolk
District Engineer; WAYNE A. HANSON,
in his official capacity as
Wilmington District Engineer;
JOSEPH K. BRATTON, LT. GEN., in his
official capacity as the Chief of
Engineers of the U.S. Army Corps of
Engineers; WILLIAM R. GIANELLI,
in his official capacity as Asst.
Secretary of the U.S. Dept. of the
Army; JOHN O. MARSH, in his official
capacity as the Secretary of the U.S.
Dept. of the Army; THE CITY OF
VIRGINIA BEACH,

Defendants-Appellees.

**NATIONAL WILDLIFE FEDERATION; NORTH
CAROLINA WILDLIFE FEDERATION,**

Amici Curiae.

**Appeals from
the United States District Court
for the Eastern District of North
Carolina, at Raleigh.
W. Earl Britt, District Judge.
(CA-84-36-5-CIV-WE)**

Argued: February 7, 1991

Decided: July 3, 1991

**Before: HALL and NEIMEYER, Circuit Judges, and
KISER, United States District Judge for the Western District
of Virginia, sitting by designation.**

**Affirmed by published opinion, Judge Kiser wrote the
opinion, in which Judge Hall and Judge Neimeyer joined.**

COUNSEL

**ARGUED: Alan S. Hirsch, Special Deputy Attorney
General, NORTH CAROLINA DEPARTMENT OF
JUSTICE, Raleigh, North Carolina, for Appellant State of
North Carolina; Patrick M. McSweeney, McSWEENEY,**

BURTCH & CRUMP, P.C., Richmond, Virginia, for Appellant Roanoke River Basin Association. George A. Somerville, MAYS & VALENTINE, Richmond, Virginia; Robert L. Klarquist, Lands and Natural Resources Division, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C., for Appellees. **ON BRIEF:** Lacy H. Thornburg, Attorney General, NORTH CAROLINA DEPARTMENT OF JUSTICE, Raleigh, North Carolina, for Appellant State of North Carolina; Michael V. Hernandez, McSWEENEY, BURTCH & CRUMP, P.C., Richmond, Virginia, for Appellant Roanoke River Basin Association. John F. Kay, Jr., M. Scott Hart, Susan Warriner Custer, MAYS & VALENTINE, Richmond, Virginia; George W. Van Cleve, Acting Assistant Attorney General, Glen R. Goodsell, J. Carol Williams, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C.; Margaret Person Currin, United States Attorney, Stephen A. West, Assistant United States Attorney, Raleigh, North Carolina, Leslie L. Willey, City Attorney, Jeffry A. Sachs, Assistant City Attorney, CITY OF VIRGINIA BEACH, Virginia Beach, Virginia; John R. Jordan, Jr., Robert R. Price, JORDAN, PRICE, WALL, GRAY & JONES, Raleigh, North Carolina, for Appellees. S. Elizabeth Birnbaum, NATIONAL WILDLIFE FEDERATION, Washington, D.C., for Amici Curiae.

OPINION

KISER, District Judge:

The State of North Carolina and the Roanoke River Basin Authority have appealed a decision of the Army Corps of Engineers to issue a permit to the City of Virginia Beach, Virginia to construct a water intake structure and pipeline that would divert sixty million gallons of water a day from Lake Gaston, a lake that is part of the Roanoke River system, approximately 85 miles to connect to Virginia Beach's water supply. Our review, like that of the district court, is limited to a determination of whether the Corps' decision was "arbitrary, capricious, otherwise not in accordance with law, or unsupported by substantial evidence." 5 U.S.C. § 706(2). We conduct the review without giving deference to the district court's decision. VAGA v. Donovan, 774 F.2d 89, 93 (4th Cir. 1985). We affirm the district court's findings that the Army Corps of Engineers complied with all appropriate statutory provisions.

I. Background¹

Virginia Beach is the largest city in Virginia, and has an inadequate supply of potable water. Aside from five emergency wells intended for contingency use only, Virginia Beach depends entirely on the City of Norfolk for its water. The city has suffered from recurrent water shortages, and has been forced to ration water on several occasions. After considering several alternatives, Virginia Beach decided that its best water source for the future would be a pipeline from Lake Gaston.

On July 15, 1983, Virginia Beach applied to the Norfolk District of the Army Corps of Engineers for a permit to construct a water intake structure, pier, boathouse and ramp in the Pea Hill Creek tributary of Lake Gaston in Brunswick County, Virginia, and a sixty-inch inside diameter

¹ The procedural history and legal and factual background are set forth in detail in two district court decisions in this case, North Carolina v. Hudson, 665 F. Supp. 428 (E.D.N.C. 1987) (Hudson I), and 731 F. Supp. 1261 (E.D.N.C. 1990) (Hudson II), and we will not undertake repeating those details here.

concrete pipe to extend to Norfolk's water treatment facilities. The pipeline would carry up to sixty million gallons per day (mgd). Eighty percent of the water would go to the city of Virginia Beach, and the remainder to nearby towns and counties.

The pipeline, like all construction affecting navigable waters within the United States, required permission from the Army Corps of Engineers. 33 U.S.C. § 403. On October 11, 1983, the Norfolk, Virginia District Corps issued a draft Environmental Assessment (EA) and a preliminary Finding of No Significant Impact (FONSI) for public review and comment. After holding three public hearings, and allowing the required 30 day comment period, the Norfolk District Corps issued the requested permit on January 9, 1984.

The pipeline would also require reallocation of storage in Kerr Reservoir, upriver from Gaston Lake, from power to water supply. This change required the approval of the Wilmington, North Carolina District Corps of

Engineers. On January 13, 1984, the Wilmington District Corps adopted the EA prepared by the Norfolk District, and issued a FONSI concluding that the proposed reallocation of storage would have no significant environmental impact.

The State of North Carolina filed this suit on January 12, 1984, seeking to prevent the pipeline from being constructed. The Roanoke River Basin Authority, eight counties in North Carolina and four counties in Virginia later intervened as plaintiffs.

Virginia Beach initiated a declaratory judgment action in the Eastern District of Virginia on January 9, 1984 (three days before the North Carolina action was initiated), seeking a declaratory judgment that the permit and contract were valid. That action was transferred to the Eastern District of North Carolina after this Court determined that the Virginia district court had no personal jurisdiction over the Governor of North Carolina, a named defendant. City of Virginia Beach v. Hudson, 776 F.2d 484 (4th Cir. 1985). The action

was later dismissed because Virginia had raised all of the same arguments as an intervenor in the case filed by North Carolina. Hudson I, 665 F. Supp. at 433.

On July 7, 1987, Chief Judge Britt issued his first ruling. He approved most of the findings of the Corps, but remanded the matter to the Norfolk District Corps for further inquiry on two issues; (1) to conduct an additional investigation of the effects of the proposed project on anadromous striped bass to determine whether an Environmental Impact Statement (EIS) would be required; and (2) to make a determination of the extent of Virginia Beach's water needs. Hudson I. In response to this order, the Corps filed a Supplemental Environmental Assessment, a Supplemental Statement of Findings (SSOF), and a Revised Findings of No Significant Impact (RFONSI). The Corps reissued the permit, adding a new mitigation condition to maintain sufficient flow during bass spawning season. On February 2, 1990, Judge Britt issued a final decision

approving the permit. Hudson II. The matter is now ripe for appeal.

II. Environmental Issues

A. Possible Impact on Striped Bass

Appellants challenge the Corps' decision not to prepare an EIS in light of the possible impact that the pipeline might have on the striped bass population of the Roanoke River. An EIS must be prepared for any "major Federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332. If a mitigation condition eliminates all significant environmental effects, no EIS is required. C.A.R.E. Now, Inc. v. F.A.A., 844 F.2d 1569, 1573 (11th Cir. 1988). The Corps has assumed that the project is a major federal action, and we shall defer to this determination. See Hudson I, 665 F. Supp. at 438. The only issue, then is whether the withdrawal of 60 mgd from Gaston Lake might significantly affect the environment.

The Council on Environmental Quality has defined the term "significantly." 40 C.F.R. § 1508.27(b).

"[S]ignificantly" as used in NEPA requires considerations of both context and intensity.

Appellants assert that three of ten listed measurements of intensity are present in this case, and that these require that an EIS be conducted.²

(4) The degree to which the possible effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects are highly uncertain or involve unique or unknown risks.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.

² Amicus claims that several other factors are also present. The considerations required by the listed definitions tend to overlap, and the evidence supporting amicus' claim is essentially the same as that cited by appellants.

Appellants claim that the level of controversy concerning the effect of the project on the striped bass population requires an EIS. The Corps found that the mitigation condition would eliminate the causes of the controversy. We find that the Corps' determination was supported by the record and, therefore, is not arbitrary and capricious.

Since 1971, the Corps has required the operators of upriver dams to release sufficient water to maintain Kerr Lake at a level between 299.5 and 302 feet during spawning season, which typically runs from April 26 to June 15. Kerr Lake, in turn, releases to Gaston which, in turn, releases to Roanoke Rapids. This release is intended to maintain a level of 13 feet in the river at Weldon, downstream from Roanoke Rapids Dam. J.A. 1807. In 1988, at the recommendation of the Roanoke River Water Flow Committee,³ the increased

³ The Committee was formed after the case was remanded to the Corps for a further determination of the environmental impact on bass. The district court noted that "the formation of a committee of 'experts' to deal with a question of the flow of water in a river without inviting
(continued...)"

flow period was augmented to run from April 1 to June 15, and also modified so that flow levels more closely replicate conditions prior to impoundment of Kerr Reservoir in 1953. For a variety of reasons, the dam releases have sometimes been insufficient to maintain the required flow levels on some days during the augmented flow period. The Corps determined that the best measure of possible impact on the bass population of the pipeline would be the number of additional "lost flow" days, where the river level is below the required level. The Corps then found that the pipeline would cause, at most, one additional "lost flow" day every seven years, where the stream level would fall below the prescribed limits under the 1971 standard. J.A. 1836.

The Corps believed that one lost flow day every seven years would have no significant effect on the bass population.

³(...continued)

the Corps, the acknowledged "expert" in such matters, raises some doubt about the impartiality of the committee and the credibility of its findings." Hudson II, 731 F. Supp. at 1269. Nonetheless, the Corps considered its recommendations in the SSOE. J.A. 1837-38.

Indeed, it pointed to some evidence suggesting that spawning increases during years of relatively low flow. J.A. 1808. However, it recognized that the effect of one additional low flow day every seven years might be controversial and, if this were to occur, an EIS might be required.

To avoid even a slight increase in the number of lost flow days, the Corps directed that Virginia Beach use storage water it purchased in Kerr Reservoir (upstream from Gaston Lake), instead of water already dedicated to the augmented spawning flows, to offset all downstream effects of its withdrawals. J.A. 1838. The Corps found that this mitigation condition would eliminate all possible effects of the pipeline. The district court found that the Corps' mitigation condition is adequate to address any possible environmental effects of the pipeline.

Appellants and amicus believe that the mitigation condition is insufficient for several reasons. First, it addresses only the problem of the number of low flow days.

A continuous decrease of the flow by 60 mgd might affect the bass population, even if the number of low flow days was unchanged. Second, it assumes that sufficient storage water will be available in Kerr Lake to maintain the lake level. Finally, the mitigation condition was not made public until the final report, so there was no opportunity for public comment or criticism.

The Corps based its mitigation condition on an entirely reasonable assumption: That the number of lost flow days is the best measure of the effect of the pipeline on the bass population. Plaintiffs generally supported this assumption in the arguments that they submitted to the Corps by focusing on lost flow days as being the decisive factor in determining any adverse impact on the spawning season. For example, the North Carolina Division of Marine Fisheries asserted, "The loss of even the last day of a spawning period could well result in production of a poor

year class rather than a normal or exceptional year class."⁴

J.A. 830-31. The United States Fish and Wildlife Service, the E.P.A. and the Sierra Club also filed comments based on the same assumption. None of those commenting provided evidence suggesting that the flow levels as currently set were insufficient.⁵ The absence of evidence to the contrary virtually compels the conclusion that a lower flow above the required level will have no significant environmental affect. The same organization suggested that "any loss of water could have an extremely significant impact," but it provided no evidence to back up this claim.

The mitigation condition also does not address the

⁴ The Corps did consider this comment, and after examining the supporting evidence, concluded that it was completely unsupported. J.A. 1810.

⁵ Indeed, the modified flow regime introduced in 1988 reduced the required flow through the April 26-June 1 period, while raising the level for the April 1-25 period. This suggests that lowering the flow within the augmented range is not considered to be problematic. The Corps also found that very high flows "tend to be associated with lower juvenile abundance indices." J.A. 1809.

problem that flow on days already lost will be even lower. Again, all of those commenting assumed that a low flow day was detrimental to bass spawning, and presented no information on the effect of lowering the flow on days when the level was already below the required amount. An issue never presented to the Corps "must not be made the basis for overturning a decision properly made after an otherwise exhaustive proceeding." Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 558 (1976). The Corps' failure to consider an effect that was not brought to its attention cannot be faulted.⁶

Appellants and amicus also argue that in the event of a prolonged drought, Virginia Beach's storage capacity in Kerr Lake might be insufficient to comply with the

⁶ The Corps also argued in its brief with this Court that the pipeline would have no effect at all on river levels during the lost flow days. Because it did not make this argument in the RFONSI and the other administrative rulings, it will not be considered here. Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Ins., 463 U.S. 29, 43 (1983).

mitigation condition. Virginia Beach submitted a Project Hydrologic Model to demonstrate that the greatest need for water in the past 75 years would have required only 54% of Virginia Beach's storage capacity. J.A. 712-13. The Corps verified this model, and found it to be persuasive. J.A. 1810. This determination is not arbitrary and capricious.

Finally, appellants complain that the mitigation condition was not available for public comment. This objection is spurious. The proposed use of Virginia Beach's storage capacity to augment the river's flow was described in the draft Supplemental Environmental Analysis that was presented for public examination on June 6, 1988. J.A. 1065, 1071. The mitigation condition required Virginia Beach to provide water, while the draft simply assumed that the water would be available for that purpose. The Corps' decision to make the mitigation condition mandatory means that the modified permit protects the appellants' interests (and the striped bass) more completely than the proposal available

for comment.

Several of those commenting from North Carolina, and two federal agencies, the Fish and Wildlife Service and the National Marine Fisheries Service, believed that the effect on the striped bass population is sufficiently uncertain that an EIS should be conducted. Appellants argue that the fact that disinterested federal agencies request that an EIS is proof that the effect is "controversial," so that the Corps abused its discretion in refusing to commission an EIS. However, the existence of a disagreement as to whether an EIS should be commissioned is not by itself grounds for a court to require an EIS. Rucker v. Willis, 484 F.2d 158, 162 (4th Cir. 1973). The Corps of Engineers should consider the comments of other agencies, but it need not defer to them when it disagrees. The Corps addressed the specific comments of the other agencies, and explained why it found them unpersuasive. No more is required.

B. Effect on Water Quality

Appellants' claim that the Corps did not adequately consider the effect of the pipeline on downstream water quality is also without merit. The Corps based its conclusion on the fact that there would be no quality affect on conditions during times of relatively low flow, as well as average flow conditions. J.A. 174. It found that the withdrawal may increase the total number of days with relatively low flow, but that the effect on the quality of the water would be insignificant. J.A. 174. This finding is supported by the record, and is not arbitrary and capricious. Although there may be some impact, if it is not significant, then an EIS is not required. 42 U.S.C. § 4332(C)(2); Hudson I, 665 F.Supp. at 439.

C. Failure to Consider Cumulative
Impact of Withdrawal

40 C.F.R. §1508.27(b)(7) requires that the Corps consider whether a project's environmental effects may be cumulatively significant in conjunction with other environmental conditions that are reasonably foreseeable, even if they are not significant by themselves. Appellants and amicus assert that the Corps failed to make this analysis, and that the cumulative effect of this withdrawal of water, in conjunction with anticipated growth of irrigation, population and industry in the Roanoke River basin, may have a significant effect on water quality.

In fact, the Corps did consider whether there would be an cumulative effects on water quality. It concluded that the effects of the withdrawal of water, coupled with anticipated downstream pollution, would not be significant. J.A. 174. It further found that additional pollution in the Roanoke River was not reasonably foreseeable, and that there

was not reason to believe that irrigation withdrawals from the river would increase in the future. J.A. 1843. - All of these findings are adequately supported by the administrative record, and are neither arbitrary nor capricious.

Plaintiffs and amicus argue that the Corps failed to consider the cumulative effect of the pipeline on the striped bass population. They note that the striped bass population has been declining for some time, in part, because of overfishing. It claims that even if the pipeline's effect on bass population might be insignificant in itself, it may exacerbate the overfishing and other stresses on the bass.

The Corps fully considered this issue in the SSOF. It found that because of the overfishing, "the small effect of the City's project on stream flows should not have any significant effect on striped bass." J.A. 1835. It further found that any improvement in environmental conditions would be likely to improve the striped bass population. There is adequate basis for this finding in the record, and it

is not arbitrary and capricious. The Corps has discharged its duty to consider the cumulative effects of the pipeline with other existing or foreseeable environmental conditions.

D. Failure to Explain Modeling Assumptions

The appellants claim that the computer model used by the Corps was made available to the public only days before the end of the comment period on the proposals. This alleged failure to disclose information made a challenge to the model more difficult to prepare. The appellants concede, however, that they received the computer model shortly before the public comment period ended. They have not explained what use they expect to make of the "the complete articulation of underlying modeling assumptions" that they claim they have never received. It is clear from the record that appellants had ample information available to them to mount a challenge to the Corps' permit. For example, they were able to form a committee of experts, the Roanoke River

Water Flow Committee, working without assistance from the Corps, that created its own models and made recommendations on river flow that were fully considered by the Corps. Hudson II, 731 F.Supp. at 1269. We are satisfied that the appellants were not prejudiced by any slowness or incompleteness in the Corps' disclosure of modeling information.

III. Public Interest Analysis

Appellants also assert that the Corps failed to consider the public interest impact of the pipeline in North Carolina, in violation of 33 C.F.R. § 320.4(a). The public interest analysis conducted by the Corps examined estimates of the population growth for Virginia Beach over the next 40 years, and concluded that the pipeline water will be necessary to meet the needs of Virginia Beach's fast-growing population. J.A. 1842. The district court examined the same data, and concluded that even with the pipeline, Virginia Beach may

soon find itself with an inadequate water supply. Hudson II, 731 F.Supp. at 1272.

Appellants argue that the Corps acted in an arbitrary and capricious manner when It considered future population growth of Virginia Beach, but not future increased water needs downstream in North Carolina. However, the Corps considered future needs in North Carolina in both the original SOF and the SSOF it wrote on remand. It found in 1984 that although large corporations were considering building a wood pulp plant and a coal-burning power plant along the Roanoke River, these projects were not firmly committed. J.A. 191. Accordingly, it would be inappropriate to consider the impact of the pipeline on these projects. On reconsideration in 1988, the Corps found that the coal burning plant would not be built, and that the paper manufacturer "is not appreciably closer to deciding to construct a new plant." J.A. 1843. It, therefore, again concluded that it was not reasonably foreseeable that these or

any other industrial plants would be appreciably affected by the pipeline. It also found that the need for water for agricultural irrigation varied widely from year-to-year, but that because the principle irrigated crop is tobacco, a crop for which acreage is controlled by the federal government, it was not reasonable that agricultural irrigation would be affected by the new plant.

Appellants' claim that the Corps considered growth only in Virginia Beach and not in North Carolina is incorrect. It considered the potential for growing water needs in both areas, and concluded that increased need was foreseeable for Virginia Beach, and not reasonably foreseeable for North Carolina. This finding is adequately supported by facts in the record, and is not arbitrary and capricious. North Carolina's objection appears to be that if Virginia Beach builds the pipeline, then 60 million gallons of water a day will be unavailable for future use in North Carolina at some point in the far future. This is true, but it

is insufficient to stop the project. The Corps properly discharged its duty to conduct a public policy review.

IV. Conclusion

Gaston Lake pipeline is a controversial project because it will remove a substantial amount of water from one river basin to a distant area. However, there is no longer any controversy concerning either the environmental effects on the Roanoke River, or the need for a new supply of water in Virginia Beach, in both absolute terms and relative to the needs of northeastern North Carolina. The Army Corps of Engineers properly considered all factors that it was required to consider before issuing a permit. Its decision to issue a permit for the project shall not be disturbed.

AFFIRMED

APPENDIX B

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NORTH CAROLINA
RALEIGH DIVISION**

No. 84-36-CIV-5

STATE OF NORTH CAROLINA,
et al.,

plaintiffs,

v.

**MEMORANDUM
OPINION**

COLONEL RONALD E. HUDSON,
et al.,

defendants.

The City of Virginia Beach, Virginia is seeking permission from the United States Corps of Engineers (the Corps) to construct a sixty-inch pipeline some 84.5 miles across southern Virginia and withdraw up to 60 million gallons of water per day (mgd) from Lake Gaston for the purpose of meeting its municipal water supply needs. After the Corps made a decision to issue the permits needed by Virginia Beach to accomplish the project, this action was begun by the State of North Carolina, the Roanoke River

Basin Association (RRBA) and several counties in Virginia and North Carolina for judicial review of the decision of the Corps. Thereafter, this court conducted a review of the Corps' decision and rendered a decision on 7 July 1987, State of North Carolina v. Hudson, 665 F.Supp. 428 (E.D.N.C. 1987).

I. PROCEDURAL HISTORY

After a thorough review of the Administrative Record and consideration of the arguments and briefs of all parties, the court remanded the matter to the Corps. The court's decision was very specific on the scope of the further review which was mandated:

On remand, the Corps shall:

1. As a part of its NEPA review make an independent assessment of the effects of the proposed project on striped bass to determine whether the preparation of an EIS [Environmental Impact Statement] is required or whether any mitigative measures are necessary; and,

2. As a part of its public interest

review make a determination of the extent of Virginia Beach's water needs.

Hudson, 665 F.Supp. at 450.

All other objections by plaintiffs to the decision¹ of the Corps were rejected. The court retained jurisdiction and directed the Corps to file with the court the results of its reconsideration and the record supporting its decision. The Corps has complied and the matter is now before the court for review of the supplemental record.²

The record includes a Supplemental Environmental Assessment (SEA), a Supplement Statement of Findings (SOF) and a Revised Finding of No Significant Impact

¹ Actually there were two decision of the Corps under review. One, by the Norfolk District, to issue a permit to construct a water intake structure and pipeline in Lake Gaston to extend to Suffolk, Virginia, and the other, the Wilmington District, to enter into a water storage reallocation contract for Kerr Reservoir.

² The record consists of twenty-three volumes of material consisting of 165 documents, most of which are multi-page. In addition, the parties have, by stipulation, added another three volumes containing in excess of fifty documents. One of the briefs filed with the court suggests that the record compiled on remand is twice the size of the original record.

(RFONSI).³ The Corps concluded that Virginia Beach's withdrawal of water from Lake Gaston will have no significant impact on the human environment, that an environmental impact statement (EIS) is not necessary, and that the amount of the proposed withdrawal, 60 mgd, is needed.

II. BACKGROUND

In order to evaluate the potential for harm to the striped bass population from the withdrawal of water from Lake Gaston, it is necessary to understand the Roanoke River Basin and its interconnected system of lakes as well as the history and habits of striped bass.

³ The Norfolk and Wilmington Districts each filed a RFONSI addressing their separate areas of responsibility, although the Wilmington District based its RFONSI on the Norfolk District's findings.

A. THE ROANOKE RIVER SYSTEM

The Roanoke River is formed at the confluence of the North and South Forks in Montgomery County, Virginia and flows generally in a southeasterly direction until it empties into the Albemarle Sound in northeastern North Carolina. Dams have been constructed on the river for both flood control and hydroelectric purposes, resulting in the formation of many lakes, the lower three of which, Kerr, Gaston and Roanoke Rapids, are important for this discussion. (Philpott and Smith Mountain are upstream from Kerr and are not directly affected by the project, although the amount of water released from them does affect the amount of water in the Kerr Lake Reservoir.) Kerr Lake (also known as Buggs' Island Lake) lies mostly in Virginia and is controlled by the Wilmington District of the Corps. Lake Gaston, just downstream of Kerr, lies mostly in North Carolina and is controlled by Virginia Power Company (VEPCO). Roanoke Rapids Lake is entirely in North Carolina, lies downstream

of Gaston, and is also controlled by VEPCO.

By use of the dams, the flow of water can be restricted from the natural flow of the river during times of flood or high water conditions and increased during drought or low water conditions. Thus, more uniformity in stream flow can be accomplished than would occur naturally. Nevertheless, wide fluctuations still occur.

All three of the dams are operated primarily for peak power projection although other goals -- flood control, lake levels, and river flow -- are also considered. It is the flow of the river below the last dam, Roanoke Rapids, that is of primary concern when considering the impact of the project on striped bass. As the flow of the river below Roanoke Rapids Dam is entirely dependent on natural rainfall and releases from the lake at the dam, the river theoretically, of course, could dry up. This condition is prevented, however, by the license issued to VEPCO by the Federal Energy Regulatory Commission (FERC) which requires minimum

releases at the Roanoke Rapids Dam in amounts which vary throughout the year. Releases of at least 1,000 cubic feet per second (cfs) are required from November through March, 2,000 cfs from April through September, and 1,500 cfs in October. VEPCO always has enough water to meet these requirements because the Corps is required by hydropower contracts with VEPCO and Carolina Power & Light Co. (CP&L) to make releases which, when combined with natural drainage into Lake Gaston and Roanoke Rapids Lake, average at least 545 cfs (352 mgd) more than VEPCO's minimums during every month of the year. Depending on its own power generation needs, VEPCO may store this surplus in Lake Gaston and Roanoke Rapids Lake for short periods of time and release it during peak electricity demand hours. The average flow of water through Roanoke Rapids Dam is 8,153 cfs.

The flow of water at Roanoke Rapids Dam is augmented during the striped bass season pursuant to the

terms of a 1971 Memorandum of Understanding (MOU) among the Wilmington District of the Corps, VEPCO and the North Carolina Wildlife Resources Commission (NCWRC). Under this agreement the Corps is required to release stored water in Kerr Lake between elevations of 299.5 and 302 feet, mean sea level, during the spawning season so as to maintain, when possible, a minimum stage of 13 feet below the Roanoke Rapids Dam. This release equals an outflow from the Roanoke Rapids Dam of approximately 5700-6000 cfs. The agreement require the augmented flow for a period of 50 days, which lasts from approximately 26 April until 15 June, although NCWRC determines the exact date.

Kerr is the largest of the three lakes and is the primary storage facility in the system. In an average year, Kerr's level fluctuates 12 feet, but in any given year it may fluctuate by as much as 27 feet, between elevations of 293

and 320 feet.⁴ The Corps makes every effort to maintain Kerr's level at the 293 minimum, but it is occasionally unable to do so and still releases the amounts required by its contract with the power companies. At those times, if the power companies agree, the Corps releases only enough water from Kerr to meet VEPCO's required releases at Roanoke Rapids.

B. STRIPED BASS

The anadromous⁵ striped bass⁶ is an important sport and commercial fish native to the eastern seaboard, thriving in both salt and fresh water. They migrate in spring from their natural habitats in the sounds and ocean up rivers and streams to spawn. Each year this ritual is repeated by striped

⁴ 320 feet is the top of the spillway at Kerr Lake.

⁵ To distinguish from the landlocked striped bass found in Kerr Lake.

⁶ Also known as Rockfish.

bass migrating from the Albemarle Sound up the Roanoke River to the vicinity of Weldon, just downstream from the Roanoke Rapids Dam, where the eggs are laid. It is thought that successful spawning is dependent upon higher-than-normal river flows as the turbulence caused by the high water keeps the eggs buoyant until they become hardened and naturally attain near-neutral buoyancy.⁷

There has been a significant decline in the population of striped bass for many years. The problem has been addressed by governmental and private groups on the state and national level in an effort to stope the decline of, and hopefully restore, this valuable natural resource. No consensus has been reached on the cause or causes of the decline although pollution, fishing pressure and interference with the spawning process are thought to be major

⁷ This principle was stated as a fact in the original record before the court but the validity of the thesis seems to be questioned in the Supplemental Record (SR). See SEA, SR 157.

contributors.

III. SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

The SEA filed by the Corps analyzes all of the materials collected and concludes that the withdrawal by Virginia Beach of up to 60 mgd from Lake Gaston will have no impact, let alone a significant impact, on the spawning of striped bass in the Roanoke River. Colonel Thomas,⁸ the district engineer of the Corps' Norfolk District, separately addresses some of the factors which have been suggested to have had some effect on the decline of the population of striped bass. His analysis of the data presented makes a convincing argument that the primary cause of the decline is overfishing. By correlating and analyzing data concerning the rate of flow at Roanoke Rapids Dam, he demonstrates that "[t]he conventional thinking for years . . . that more water is better . . . may not have been entirely beneficial to

⁸ Colonel J.J. Thomas, successor to Colonel Hudson.

the striped bass." SEA, SR 157, p. 4. He also effectively rebuts the suggestion that fluctuations in the rate of flow probably had an adverse effect on spawning activity.

To plaintiffs' contention that the loss of even one day of the minimum augment flow could have a severe impact on the success of spawning, Colonel Thomas demonstrated through data analysis that spawning has historically been practically completed by the first of June and concluded that "[t]heoretically, the period from June 1-June 15 could be lost from the end of a spawning season with a subsequent loss of only 1% of the spawned eggs, on average." SEA, SR 157, p. 6.

The 1983 Final Environmental Assessment (FEA), based on a model of the City of Virginia Beach, stated that the project would cause a loss of the last day of the spawning flows in one out of four years and the last two days once out of 25 years. Following, remand, Virginia Beach offered to utilize the volume of storage in Kerr Lake which it purchased

from the Corps in such a way as to eliminate the loss of any days of spawning flows due to its project. The SEA makes note of this offer and states further:

To demonstrate this capability, the Wilmington District prepared a mathematical hydrologic model of the river and reservoirs using daily flow records for the period of record. This model showed that the City's project (without using the City's storage in Kerr Reservoir) would cause a loss of the last day of the spawning flows in one out of seven years and no years with a loss of two days or more. (It should be noted that this last day may well occur prior to June 15, since 50 days of flow are not always available.) The small extent of the impact is due mainly to the small size of the City's withdrawal (60 mgd maximum) compared to the spawning season flows (6000 cfs = 4000 mgd). Use of the City's storage to restore lost days caused by the project would result in a maximum drawdown not exceeding 0.15 foot within Kerr Reservoir from elevation 299.5 feet to 299.35 feet on the average of once every seven years This volume of water is so small in comparison to the volume of the three reservoirs that even during the worst drought of record, coinciding with complete compensation from the City's storage in Kerr during an entire 50-day spawning period, and at the maximum withdrawal rate (60 mgd), flows from the Roanoke Rapids dam would

never be caused to drop below their FERC minimums at any later time during the drought. Water levels would not be affected in either the Gaston or Roanoke Rapids reservoirs, and the maximum drawdown due to the project in Kerr Reservoir would be only an additional 0.15 foot. It is apparent, then, that the City's project would have no effect on Virginia Power's ability to meet FERC minimum releases and that, with the use of Virginia Beach's storage, all project effects on flow during the striped bass spawning season can be eliminated.

SEA, SR 157, p.6.

IV. SUPPLEMENTAL STATEMENT OF FINDINGS

The SSOF filed by the Corps in response to this court's order of 7 July 1987 states that all available information, including data contained in the SEA and comments received from federal, state and local agencies, and the general public had been evaluated. The SSOF contains a summary of the evaluation and the Corps' conclusion. Most important to this review is the conclusion by Colonel Thomas that any environmental impacts "would

be non-significant in the context of NEPA." SEA, SR 158,

p.10. Colonel Thomas further states:

However, it is appropriate for me to consider what would happen if I'm wrong. I recognize that striped bass are an important resource in North Carolina and elsewhere, and that much effort has been directed by Congress and Federal and State agencies toward their restoration. I also recognize that this project has received a tremendous amount of public attention over the last few years, and that public perception may be a legitimate concern even when it is not supported by fact. Therefore, I find it appropriate to amend the City's permit to require as a condition that they must allow the Wilmington District, Corps of Engineers to utilize the storage which the City has purchased in Kerr Reservoir during the period of the striped bass augmented spawning flows to not cause the loss of any augmented spawning flow days which would otherwise be caused by the City's withdrawal. By completely compensating for their withdrawal during the spawning season, this will virtually eliminate the possibility of any adverse effects of even minimal significance which this project could cause during the critical life stages of the Roanoke/Albemarle striped bass.

SSOF, SR 158, p.10.

V. THE CORPS' NEED ANALYSIS

Upon remand the Corps invited submissions regarding water supply analyses and projections of deficits for Virginia Beach (the Norfolk water system) and Southside Hampton Roads through the year 2030. The State of North Carolina, the City of Virginia Beach and the Virginia State Water Control Board responded. These submissions were evaluated by the Corps which concluded that Virginia Beach's need is at least the 60 mgd for which a withdrawal permit is sought. Colonel Thomas placed great reliance on a 1984 study by the Corps which found a 55 mgd deficit in Hampton Roads and in the James Water Supply Plan of the Virginia State Water Control Board which found a 2030 deficit in the Norfolk - Virginia Beach - Chesapeake - Portsmouth - Suffolk area of between 49 and 81 mgd. With regard to the latter study the SSOF stated:

The water system of these five cities represent the total pool of existing supplies from which Virginia Beach's needs could be met. The 49

mgd figure represents that amount of water which would be needed to avoid "storage depletion" (i.e., running completely out of water after having instituted voluntary conservation, followed by mandatory water use restrictions, followed by rationing). The 81 mgd figure represents the amount needed to avoid having to impose any but voluntary conservation. These figures also assume that the distribution systems of the entire five-city area would be completely interconnected and that each city would fully share all of its water with all of its neighbors. The former is correct in large part already, and further interconnection will encounter problems with diminishing returns. The different water sources and the independent operation of the municipal utilities would tend to preclude the total and equal sharing of water that can be achieved with complete efficiency only in theory. For these reasons the actual five-city deficits will probably be slightly more than these theoretical deficits projected by the Board.

SSOF, SR 158, p. 13.

VI. APPLICABLE STATUTES AND REGULATIONS

As the court stated in its prior review, four statutes and their implementing regulations are pertinent: The Rivers

and Harbors Appropriation Act of 1899, 33 U.S.C.A. § 403 (1986); the Clean Water Act, 33 U.S.C.A. §§ 1251-1376 (1986); the Water Supply Act of 1958, 43 U.S.C.A. §§ 390b-390f (1986); and the National Environmental Policy Act of 1969 (NEPA); 42 U.S.C.A. §§ 4321-4347 (1977). Pursuant to section 10 of the Rivers and Harbors Act of 1899, 33 U.S.C.A. § 403 (1986), the Corps of Engineers is responsible for evaluating proposed construction projects in the navigable waters of the United States. Section 404 of the Clean Water Act, 33 U.S.C.A. § 1344 (1986), gives the Corps jurisdiction to issue permits for the discharge of dredged or fill materials into the navigable waters of the United States. The Water Supply Act authorizes the Corps to reallocate water storage in federal reservoirs such as Kerr Reservoir. 43 U.S.C.A. § 39b (1986). In exercising the authority granted by these three statutes, the Corps must also comply with the prerequisites of NEPA.

A. NEPA

Congress enacted NEPA to oblige federal agencies to consider the environmental consequences of proposed actions in the decision-making process, thereby insuring "fully informed and well-considered" decisions. Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 228 (1980) (per curiam) (quoting Vermont Yankee Nuclear Power Corp. v. National Resources Defense Council, Inc., 435 U.S. 519, 558 (1978)). Pursuant to section 102(2)(C) of the Act, 42 U.S.C.A. § 4332(2)(C), a federal agency has the duty to prepare a detailed environmental statement, known as an environmental impact statement (EIS), on every major federal action significantly affecting the quality of the human environment. In order to determine which actions trigger this provision, the Corps has promulgated regulations to implement NEPA, 33 C.F.R. pt. 230 (1986). The Corps is simultaneously governed by the Council on Environmental Quality (CEQ) regulations construing and implementing

NEPA, 40 C.F.R. pts. 1500-1508 (1986).

These implementing regulations outline Corps procedure for evaluating a proposal. Before issuing a permit the Corps must prepare an environmental assessment (EA) to determine whether the proposed action would significantly affect the quality of the human environment, thereby requiring preparation of a comprehensive EIS. 33 C.F.R. pt. 230, app. B(8)(a). Typically, the EA is a brief evaluation, normally not exceeding fifteen pages, of the likely environmental effects of a proposal, the need for and the alternatives to the proposed action. 33 C.F.R. §230.9(c) and 33 C.F.R. pt. 230, app. B(8)(a). When the district engineer concludes that a project will not significantly affect the quality of the human environment, he must prepare a FONSI presenting the reasons for this conclusion. 33 C.F.R. § 230.10 and 33 C.F.R. pt. 230, app. B(8)(c).

**B. PUBLIC INTEREST REVIEW AND OTHER
CORPS REGULATIONS**

In addition to the regulations implementing NEPA, the Corps has adopted regulations which serve as guidelines for the evaluation of all regulatory permit applications. 33 C.F.R. pt. 320 (1986). Chief among these regulations in 33 C.F.R. §320.4(a) which requires the Corps to undertake a general "public interest review" to decide whether a permit should issue. In this review the Corps must evaluate a proposal's overall impact on the public interest, balancing the "benefits which reasonably may be expected to accrue . . . against its reasonably foreseeable detriments." 33 C.F.R. § 320.4(a).

The decision whether to issue the permit depends on the outcome of this balancing of factors. A permit is to be granted unless the district engineer determines that it will be contrary to the public interest. 33 C.F.R. §320.4(a)(1). When the decision on the permit application is made the

district engineer must include the results of his public interest review in the Statement of Findings, a document which must be prepared in all permit decisions not requiring preparation of an EIS. 33 C.F.R. § 325.2(a)(6) (1986).

VII. CONTENTIONS

Both North Carolina and RRBA devote most of their arguments to the striped bass issue. Each contends that the Corps' analysis is flawed and not supported by expert opinion. They argue that the Corps failed to utilize data on a new flow regime using instead an outdated flow regime. The Corps' conclusions regarding the effect of fishing on the striped bass problem are disputed, and the Corps is taken to task for failing to consider cumulative impacts in its analysis. RRBA also contends that the Corps ignored important findings by the United States Congress. Additionally, both parties attack the Corps' determination of the extent of Virginia Beach's need.

VIII. STANDARD OF REVIEW

The applicable review standard is found in the Administrative Procedure Act which provides in pertinent part:

The reviewing court shall --

(2) hold unlawful and set aside agency action, findings, and conclusions found to be -

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

. . . .

(D) without observance of procedure required by law.

5 U.S.C.A. § 706(2)(A) & (D) (West 1977). An interpretation of this standard must begin with the Supreme Court's decision in Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402 (1971). In Overton Park the Supreme Court made clear that the court's obligation pursuant to this statute is twofold. The court must consider,

first, whether the agency acted within the scope of its authority, and second, whether the actual choice made by the agency was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. To make this finding the court must consider whether the decision was based on a consideration of the relevant factors and whether there was a clear error of judgment. This standard of review is highly differential and the agency decision is "entitled to a presumption of regularity." Overton Park, 401 U.S. at 415.

The agency must examine the relevant data and articulate a satisfactory explanation for its action, including a "rational connection between the facts found and the choice made." Boman Transportation, Inc. v. Arkansas-Best Freight Systems, Inc., 419 U.S. 281, 285 (1974), reh'g denied, 420 U.S. 956 (1975) (quoting Burlington Truck Lines, Inc. v. United States, 371 U.S. 156, 168 (1962)). Furthermore, the court may not supply a reasoned basis for the decision that the agency has not given. Bowman

Transportation, 419 U.S. at 285-86. In Motor Vehicles Manufacturers Ass'n of the United States, Inc. v. State Farm Mutual Auto Insurance Co., 463 U.S. 29 (1983), the court said:

[A]n agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Id. at 43.

In reviewing whether the agency has complied with the requirements of NEPA, the only role for the court is to insure that the agency has taken a "hard look" at the environmental consequences; it cannot "interject itself within the area of discretion of the executive as to the choice of the action to be taken." Kleppe v. Sierra Club, 427 U.S. 390, 410 n. 21 (1976). In enacting NEPA, Congress did not

require agencies to elevate environmental concerns over other appropriate considerations. Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87 (1983). In applying the arbitrary and capricious standard to NEPA determinations, the court must engage in a substantial inquiry to determine whether the agency, in its conclusions, made a good faith judgment, after considering all relevant factors, including possible alternative or mitigative measures. Coalition for Responsible Regional Development v. Coleman, 555 F.2d 398 (4th Cir. 1977). In passing on the good faith issue, the court may not substitute its judgment for that of the agency but must only look to see if the official or agency took a hard look at all relevant factors. In considering alternatives, the agency need only set forth those alternatives sufficiently so as to permit a reasoned choice. Coleman, 555 F.2d at 400.

IX. ANALYSIS

A. EFFECT OF THE PROJECT ON STRIPED BASS

1. The Effect of River Flow

Plaintiffs contend that the conclusions reached by the Corps are at odds with the conclusions of the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS), the North Carolina Wildlife Resources Commission (NCWRC) and the North Carolina Division of Marine Fisheries (NCDMF), all of whom submitted comments to the Corps. Plaintiffs further contend that the Corps' analysis is flawed because it used the "old flow regime" instead of a new one. The "flow regime" refers to the flow at the Roanoke Rapids Dam during the spawning season which, as noted earlier, is a period of time when the FERC mandated flow is highest and the flow is augmented by the additional water provided under the MOU. Plaintiffs contend that this regime is outdated and needs to be

changed. Indeed, such is the argument of officials from the four agencies named above, a fact acknowledged by the Corps.

After remand of the matter to the Corps in 1987, the Roanoke River Water Flow Committee (committee) was formed. The committee consists of representatives of the four wildlife agencies, a representative from the North Carolina Department of Agriculture and fisheries biologists from North Carolina State University and East Carolina University. Apparently, none of the Corps' experts were asked to serve as members of the committee, although a representative from the Corps was asked to, and did, serve as an "advisor" to the committee. This committee collected data and concluded that the 1981 flow regime was inadequate and that flows much greater than the 2,000 cfs FERC minimum are necessary before the beginning of the spawning season in order to attract mature bass to the spawning grounds and to provide satisfactory conditions for the growth

of plankton, the food source for young striped bass. In addition, the committee concluded that increased flows are necessary during the spawning season to stimulate the fish to release their eggs and after spawning season to transport eggs and larvae to their feeding grounds. These findings led the committee to conclude that an increased period of augmented flow was necessary. Its first recommendation was for augmented flow for a period of 122 days between 1 March and 30 June, ranging from 7543 cfs in March to 3058 cfs at the end of June. After consultation with the Corps and VEPCO, however, these dates and rates of flow were revised downward to provide for lower flows for a shorter period of time.

In the SSOF, Colonel Thomas made note of and commented upon submissions of the committee and the various agencies and acknowledged that "different conclusions can and have been reached from the same raw data." He agreed with some conclusions by the committee

and disagreed with others. Important to this analysis is the fact that he considered all conclusions. Nothing more was required. The fact that the Corps did not change its decision based on those conclusions does not make the decision arbitrary or capricious. The court finds the Corps' decision, in this respect, to be in accordance with the requirements of the law. The court is particularly impressed with the fairness -- the lack of arbitrariness -- in the Corps' treatment of each contention advanced by plaintiffs based on work of the committee. This treatment is especially commendable in view of the fact that those who formed the committee did not show the same courtesy to the Corps, either in the formation of the committee or in its functioning. The formation of a committee of "experts" to deal with a question of the flow⁹ of water in a river without inviting the Corps, the

⁹ Even the name of the committee, The Roanoke River Water Flow Committee, suggests that its primary function is to deal with the flow of water in the Roanoke River!!

acknowledged "expert" in such matters, raises some doubt about the impartiality of the committee and the credibility of its findings. The timing of the committee's formation increases those doubts.

Casting aside any doubts arising out of formation of the committee, however, the court is impressed with the thoroughness and impartiality of the Corps' analysis. Especially when given the presumption of regularity to which the Corps' decision is entitled, see Overton Park, 401 U.S. at 415, the court is convinced that the Corps has adequately examined the data and articulated a satisfactory explanation for its decision.

There can be no doubt that the flow of the Roanoke River, especially at the Roanoke Rapids Dam, has some effect on the success or failure of the reproduction of striped bass. If this valuable resource is to survive, and particularly if it is to regain its former population level, the best efforts of all interested parties, including state and federal agencies,

must be asserted. Those efforts have been going on for many years now and they must continue. The court hopes that one benefit of this massive and time-consuming lawsuit will be to focus increased attention on the importance of this natural resource. Interruptions in the delicate balances of nature, whether through pollution, use and abuse of resources such as water, or through other causes, invariably take a heavy toll on natural resources, particularly fish and wildlife.

Separate and apart from the work of the committee, plaintiffs contend that the Corps erred by not accepting the recommendations of the four expert agencies most directly concerned with striped bass, USFWS, NMFS, NCDMF and NCDWR, all of whom expressed the view that a full environmental impact study should be conducted and an EIS prepared.¹⁰ As noted in this court's prior opinion, Corps

¹⁰ It is at least questionable whether this view prevails when the mitigation requirement is considered as only one of the agencies, USFWS, addressed mitigation. SR 102, pp.3-4.

regulations require consultation with these agencies and accord "great weight" to their views. With good reason, however, nothing in the regulations, the statutes, or the cases interpreting either requires the Corps to follow the views of such agencies. Such a requirement would give the agencies veto power over Corps decisions. Sierra Club v. Callaway, 499 F.2d 982 (5th Cir. 1974). In making decisions affecting specific natural resources it is to be expected that the Corps should be required to consult with experts in the field and seriously consider their views. The final decision remains, as it must, for the Corps.

2. The Effect of Fishing

In its analysis of the decline of the striped bass population, the Corps considered the effect of fishing and concluded that overfishing was a significant factor. Plaintiffs contend that the Corps' analysis was flawed and that the effect of fishing was not appropriate for consideration in the

SEA. However, as the Corps said in its SSOF:

The court directed the Corps to address the effects of the City's project on striped bass. Several factors affect, or may affect, the Roanoke/Albemarle striped bass: recruitment, natural mortality, fishing mortality, flow, water quality, etc. Thought of as an equation with many variables, it is exceedingly difficult to find the result of altering one variable without knowing something about the other variable.

SSOF, SR 158, p.7. The court concurs and feels confident that had the Corps not considered fishing mortality as well as the other variables, plaintiffs would now be citing that failure in support of their position in this case.

Plaintiffs particularly object to the Corps' consideration of a document of the Atlantic States Marine Fisheries Commission (ASMFC) contending that it was only a draft document by a subcommittee of the commission whose findings have been cast into doubt by later data. ASMFC has been studying the major striped bass populations along the East Coast for many years and a subcommittee has

been studying fishing mortality which is defined as "the measure of that portion of a population which is lost due to fishing, as opposed to natural mortality (predation, disease, etc.)." SEA, SR 157, p.10.

USFWS and NMFS disagreed with the findings of the subcommittee of ASMFC and communicated their opinions to the Corps. Their disagreement was based, in large measure, on the successful 1988 spawning season.

Colonel Thomas, in his analysis, recognized that the document was a draft report of a subcommittee so neither plaintiffs nor this court have been deceived. In addition, he considered the opinions of USFWS and NMFS and concluded in his SSOF that the earlier analysis in the SEA was correct and that "it [is] unlikely that any improvement in environmental conditions would substantially improve striped bass recruitment until the overfishing problem has been remedied." SSOF, SR 158, p.7. The court is unable to say that the Corps' finding in this respect, or the analysis leading

to it, was arbitrary or capricious.

3. Cumulative Impacts

Plaintiffs complain that the Corps did not consider the cumulative impacts of potential future uses of the river, such as municipal, industrial and agricultural withdrawals, on striped bass. In its first consideration of this matter the Corps considered other potential uses of the Roanoke River as they might impact on river flow. The court, in its initial review, found this part of the Corps' decision not to be arbitrary or capricious. Furthermore, the remand order was specific as to the scope of the additional review required and it did not include cumulative impacts of potential future uses. Finally, such future uses remain now, as they did at the first review, entirely speculative.

4. Congressional Findings

RRBA contends that the Corps ignored important congressional findings when analyzing the effects of the project on striped bass. The basis of this contention is a bill passed by Congress reauthorizing appropriations to implement the Atlantic Striped Bass Conservation Act. 16 U.S.C.A. § 1851 (West 1985) (the Act). The Act, P.L. 100-589, 102 Stat. 2984 (Nov. 3, 1988), appropriated funds for a period of three years for the continuation of the activities authorized by the Act. By appropriating these funds, Congress reiterated concerns which have been known for decades, such as the fact that the striped bass populations have been declining and that many factors, including overfishing and river flow in the spawning grounds, are thought to be involved. The Act mandates a study in an effort to find causes for the decline and solutions to the problem. It is quite obvious that the concerns addressed in the Act are the same ones addressed by the Corps in its

assessment, and the court finds no deficiency in the decision of the Corps on this ground.

If this legislation has any significance in the decision of the court, it lies in what is not said, rather than in what is said. As is obvious to all, the project underlying this action is controversial and has involved the political leaders of Virginia and North Carolina for at least a decade. This legislation was passed in 1988, well after the court's July 1987 decision remanding the matter to the Corps for reconsideration primarily of the striped bass issue. Thus, when the Act was passed, Congress knew that striped bass, the subject of the Act, were also the central focus of this lawsuit. If Congress had intended that a moratorium be placed on withdrawals from the Roanoke River pending the study it mandated or that the Corps or this court should consider such action, it, no doubt, would have expressed its intent in the Act.

5. Mitigation

As noted, the Corps ordered mitigation measures, as a precaution, even though it concluded that the project would have no significant impact on striped bass. North Carolina argues that even this measure is insufficient because it is based on the old flow regime and a flawed model. The Corps demonstrated, however, that the mitigative measures will result in no impact by the project under either flow regime or either model.¹¹

Courts have permitted the effect of mitigation measures to be considered in determining whether preparation of an EIS is necessary. Jones v. Gordon, 792 F.2d 821, 829 (9th Cir. 1986). "[W]hen mitigation measures compensate for otherwise adverse environmental impacts, the threshold level of 'significant impacts' is not

¹¹ The "models" referred to are computer models, one constructed by the Corps' Wilmington office and the other by Virginia Beach. The Corps relied primarily on its own model.

reached so no EIS is required." C.A.R.E. Now, Inc. v. F.A.A., 844 F.2d 1569, 1575 (11th Cir. 1988), reh'g denied, 854 F.2d 1326 (11th Cir. 1988) (citing Cabinet Mountains Wilderness/Scotchman's Peak Grizzly Bears v. Peterson, 685 F.2d 678, 682 (D.C. Cir. 1982)). As the court said in Cabinet Mountains Wilderness:

NEPA's EIS requirement is governed by the rule of reason . . . and an EIS must be prepared only when significant environmental impacts will occur as a result of the proposed action. If, however, the proposal is modified prior to implementation by adding specific mitigation measures which completely compensate for any possible adverse environmental impacts stemming from the original proposal, the statutory threshold of significant environmental effects is not crossed and an EIS is not required. To require an EIS in such circumstances would trivialize NEPA and would 'diminish its utility in providing useful environmental analysis for major federal actions that truly affect the environment.'

685 F.2d at 682 (citations omitted).

Dire consequences, particularly in the river flow, are forecast by North Carolina in the event of a severe drought.

Whether that forecast or the Corps' forecast, that the project will have no impact on the river flow, is correct remains to be seen. This court is not an expert on that subject. Neither is North Carolina. The Corps is. And it is to the Corps that the Congress has entrusted the final decision. This court's sole function is to review the Corps' decision under the standard herein set out. Having done so, the court is convinced that the decision, insofar as it deals with striped bass, is not arbitrary and capricious. This is especially true considering the mitigative measure which was ordered.

B. VIRGINIA BEACH'S NEED

Plaintiffs contend that the Corps has not complied with the court's mandate to assess Virginia Beach's need. Specifically, they contend that population projections which have been used are too high and that other sources of water have not been adequately factored into the equation. The court disagrees. This court's 1987 Opinion upheld as

reasonable the Corps' determination that Virginia Beach had a need for water and remanded only for a determination of the extent of that need. Upon remand the Corps sought input from all interested parties and all available sources. Its analysis of the projections of the amount of water Virginia Beach will need in 2030 and the amount which will be available may be flawed in some respects but is not arbitrary or capricious. Indeed, this court is convinced that 60 mgd in 2030 may be insufficient to meet the city's need after considering all other reasonably foreseeable sources of water.

As Colonel Thomas stated:

I am convinced that there will never be a consensus among experts, much less among those willing to offer an opinion, as to the extent of Virginia Beach's water needs. A cynic would say, ad hominem, that North Carolina and RRBA, as plaintiffs, are underestimating the need and Virginia Beach, as defendant, is overestimating it and, in fact those parties have said just those things about each other. It is not sufficient to merely select a figure in the middle, though, because potable water is vital to human health and welfare and such decisions must not be made

so lightly.

SSOF, SR 158, pp.12-13. Colonel Thomas then very carefully analyzed the available information and contentions and concluded that "Virginia Beach needs this 60 mgd project." He reached this conclusion only after a searching analysis which complies with the requirement of an assessment of the public need for the project.

IX. CONCLUSION

As noted in this court's earlier opinion, the center of the controversy here is the interbasin transfer of water. The controversy is not state against state,¹² but basin against

¹² Such clashes are common within the State of North Carolina where fourteen interbasin transfers now divert about 40 mgd. One such dispute currently exists over the proposal of two Wake County towns, Cary and Apex, to withdraw water from Lake Jordan, in the Cape Fear Basin, and discharge it into the Neuse River Basin. The News and Observer, Raleigh, N.C., January 15, 1990, at 1B. Such transfers have served as a "lightning rod for disputes among water users in North Carolina and elsewhere." Id. (quoting from the fall issue of Popular Government magazine, a publication of the Institute of Government, Chapel Hill, North Carolina).

basin, the James River Basin against the Roanoke River Basin. This point is borne out by the fact that many of the plaintiffs are residents of the State of Virginia. The State of North Carolina is lead plaintiff but only because more of its citizens are involved.

It is quite natural for citizens to be concerned with the withdrawal of water from the basin in the area in which they live for use in another place. Interbasin transfer not only eliminates the availability of the water from the basin but it also has the potential to increase the degree of pollution of the water remaining in the basin. Nevertheless, whether to permit interbasin transfer of water is essentially a political decision.

Water is a necessity of life. It is a valuable resource which must be protected and conserved and shared by all. Congress has long recognized the importance of this natural resource and has passed many acts, some of which are relevant to this litigation, to conserve it and regulate its use.

Primary responsibility for enforcement and implementation of the legislation pertinent here lies with the Corps. It has discharged that responsibility and concluded that the City of Virginia Beach should be allowed to withdraw up to 60 mgd from Lake Gaston. This court's review disclosed that, in reaching its decision, the Corps has taken a "hard look" at the environmental consequences, including the potential effect on striped bass. Kleppe, 427 U.S. at 410. The Corps' decision will be upheld. An appropriate order will issue.

This 2 February 1990.

W. EARL BRITT
United States District Judge

APPENDIX C

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NORTH CAROLINA
RALEIGH DIVISION
No. 84-36-CIV-5**

STATE OF NORTH CAROLINA,
et al.,

plaintiffs,

v.

ORDER

COLONEL RONALD E. HUDSON,
et al.,
defendants.

In accordance with the memorandum opinion of even date herewith, the decision of the United States Army Corps of Engineers to issue a permit to the City of Virginia Beach, Virginia, to construct a water intake structure and pipeline in Lake Gaston to extend to Suffolk, Virginia, and to enter into a water storage reallocation contract for Kerr Reservoir on behalf of the United States with the City of Virginia Beach are affirmed.

This 2 February 1990.

W. EARL BRITT, United States District Judge

APPENDIX D

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NORTH CAROLINA
RALEIGH DIVISION**

No. 84-36-CIV-5

STATE OF NORTH CAROLINA,
et al.,

Plaintiffs,

v.

**MEMORANDUM
OPINION**

COLONEL RONALD E. HUDSON,
et al.,

Defendants.

This action seeks judicial review of two decisions of the United States Army Corps of Engineers: (1) to issue a permit to the City of Virginia Beach, Virginia, under section 10 of the Rivers and Harbors Appropriation Act of 1899, 33 U.S.C.A. § 1344 (West 1986), to construct a water intake structure and pipeline in Lake Gaston to extend to Suffolk, Virginia; and (2) to enter into a water storage reallocation contract for Kerr Reservoir on behalf of the United States

with the City of Virginia Beach pursuant to the Water Supply Act of 1958, 43 U.S.C.A. § 390b (West 1986). Plaintiffs, the State of North Carolina, the Roanoke River Basin Association (RRBA), four counties located in Virginia and eight counties located in North Carolina, challenge the issuance of the permit, contending that it violates the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C.A. §§ 4321-4347 (1977), the Clean Water Act of 1977, the Rivers and Harbors Appropriation Act of 1899, the Coastal Zone Management Act, 16 U.S.C.A. §§ 1451-1464 (West 1985), the Water-Supply Act and the various federal regulations implementing those statutes. Plaintiffs allege that the contract was executed in violation of NEPA, the Water Supply Act, the Clean Water Act and their implementing regulations. Plaintiffs ask the court to declare the pipeline construction permit and water supply contract void and remand the case to the Corps, with directions that before issuing any new permit or entering into any new water

supply contract the Corps must (1) prepare an environmental impact statement (EIS) pursuant to section 102(2)(C) of NEPA and (2) conduct a meaningful public interest review pursuant to 33 C.F.R. § 320.4 (1986).

A hearing was held on 7 November 1986 on the parties' motions for summary judgment, and the case is now ripe for final disposition on the merits.

I. FACTS AND PRIOR PROCEEDINGS

The City of Virginia Beach, Virginia (Virginia Beach), now the largest in the state, is located on the Atlantic Ocean and in close proximity to other large bodies of water, such as Chesapeake Bay and the James River. Yet it suffers from a lack of an adequate supply of potable water to meet the needs of its citizens. Until recently when five wells were constructed for contingency use in the event of an

emergency,¹ it depended entirely on the City of Norfolk for its water. The need for water has been especially acute in times of drought, and on at least three occasions in the last decade droughts have brought hardship on the citizens and the implementation of conservation measures, including rationing. Seeking a permanent solution to its problem, Virginia Beach engaged in studies of its own and participated in joint studies with others. Every conceivable source, including desalting, wastewater reuse, groundwater, lakes and rivers, was explored before the City decided that its best alternative for a reliable source was Lake Gaston in the Roanoke River Basin.

The Roanoke River has its headwaters in the mountains of Virginia, near the City of Roanoke. It flows southeasterly, crossing the North Carolina border between

¹ The wells were constructed following the drought of 1980-81 and are located within other municipal jurisdictions, Suffolk, Isle of Wight County and Southampton County. They are intended for use only in the event of an emergency, and their use reverts to the municipalities in which they lie after contract periods of ten to fifteen years.

Bracey, Virginia, and Gaston, North Carolina, and empties into the Albemarle Sound near Plymouth. Over the years several dams have been constructed on the river for flood control and hydroelectric purposes. This has resulted in several lakes, including Smith Mountain, John H. Kerr,² Gaston and Roanoke Rapids.

On 15 July 1983 Virginia Beach applied to the Norfolk District of the Army Corps of Engineers for a permit to construct a water intake structure, pier, boathouse and ramp in the Pea Hill Creek tributary of Lake Gaston located in Brunswick County, Virginia, and a sixty-inch inside diameter concrete pipe to extend to the City of Norfolk's water transport and treatment facilities located in Suffolk, Virginia, a distance of approximately 84.5 miles.³ The pipeline was proposed to withdraw and transport up to

² Also known as Buggs Island.

³ The City of Norfolk would continue to treat the water derived from the new source.

a total of sixty million gallons per day (mgd) of water by the year 2030. Under the proposal forty-eight mgd would ultimately be treated for the use of Virginia Beach, ten mgd for Chesapeake, one mgd for the Isle of Wight County, and one mgd for Franklin. As part of its application Virginia Beach submitted an environmental study prepared by its consultants intended to assess the probable environmental impacts of the proposed project and evaluate alternatives to the proposal.

Over the next several months approximately 6,000 people attended three public hearings in North Carolina and Virginia where substantial oral and written comments were presented expressing both support for and opposition to the proposed project.⁴ On 11 October 1983 the Norfolk District Corps issued a draft environmental assessment (EA) and a

⁴ The first hearing was held in Lawrenceville, Virginia, on 25 August 1983 before the issuance of the draft EIS and draft FONSI. The other two, at Roanoke Rapids, North Carolina, on 14 November 1983 and Virginia Beach, Virginia, on 17 November 1983, were held before the issuance of the final EIS and final FONSI.

preliminary finding of no significant impact (FONSI) for public review and comment. On 7 December 1983 the Corps issued its final EA and FONSI which concluded that the project would have no significant environmental impacts and therefore preparation of an EIS was not required by NEPA. Consistent with Corps regulations a thirty-day public comment period, which expired on 6 January 1984, was announced. Comments were received by the Corps in response to the final EA and FONSI, including comments submitted by North Carolina and RRBA. On 9 January 1984 the Norfolk District Engineer signed and issued a permit to Virginia Beach. At the same time he issued a Statement of Findings (SOF) addressing comments on the EA and FONSI.

Meanwhile, the Wilmington District Corps was considering a request by Virginia Beach to enter into a water supply contract pursuant to the Water Supply Act of 1958 to reallocate storage in Kerr Reservoir from power supply to water supply. The contract was proposed to reallocate to

Virginia Beach 10,200-acre feet of water storage space in Kerr Lake which Virginia Beach could require the Corps to release into Lake Gaston to offset the withdrawal from Lake Gaston. On 13 January 1984 the Wilmington District Engineer adopted the EA prepared by the Norfolk District Engineer and issued a FONSI which concluded that no significant environmental impacts would result from the proposed reallocation and therefore an EIS was not required by NEPA. On 12 January 1984 the City signed the contract which was approved by the Assistant Secretary of the Army for Civil Works on 30 January 1984.

On 12 January 1984 the State of North Carolina filed this suit against Colonel Ronald E. Hudson, District Engineer for the Norfolk District of the Corps of Engineers; Colonel Wayne A. Hanson, District Engineer of the Wilmington District of the Corps of Engineers; Lieutenant General Joseph K. Bratton, the Chief of Engineers of the Corps of Engineers; William R. Gianelli, Assistant Secretary of the

United States Department of the Army; and, John O Morris, Jr., Secretary of the United States Department of the Army. All defendants are sued in their official capacities. The complaint alleges that issuance of the pipeline construction permit was arbitrary and capricious and in violation of NEPA, the Clean Water Act, the Rivers and Harbors Act, the Coastal Zone Management Act, the Water Supply Act, and the federal regulations implementing those acts. On 20 June 1984 the court allowed RRBA, eight counties in North Carolina and four counties in Virginia to intervene as plaintiffs. The counties filed a single complaint which mirrors that of the State of North Carolina.⁵ RRBA's complaint in intervention challenges the issuance of the pipeline construction permit and also challenges execution of the water storage reallocation contract between the United States and Virginia Beach. On 3 December 1985 North

⁵ Hereinafter, references to North Carolina refer to the joint positions of North Carolina and the twelve counties.

Carolina was allowed to amend its complaint to also challenge execution of the water storage contract. On 4 December, 1985 Virginia Beach was allowed to intervene as a part defendant.

Meanwhile, on 9 January 1984, Virginia Beach initiated an action in the Eastern District of Virginia (the Virginia Beach action) against RRBA and the Governor of North Carolina seeking a declaratory judgment that the permit and contract were valid. The governor of North Carolina moved to dismiss for lack of personal jurisdiction. The district court held that the governor was amenable to service of process pursuant to the Virginia long-arm statute, Va. Code § 8.01-328.1 (Repl. Vol. 1984). An interlocutory appeal was taken to the United States Court of Appeals for the Fourth Circuit which ruled that the Virginia long-arm statute conferred no jurisdiction for assertion of plaintiffs' claims over the Governor of North Carolina. City of Virginia Beach v. Roanoke River Basin Association, 776

F.2d 484 (4th Cir. 1985). The court ruled that Virginia Beach should be given an opportunity to transfer that case to the Eastern District of North Carolina. On 14 November 1985 Virginia Beach's motion to transfer was allowed, and the case became Civil Action No. 85-1625-CIV-5 in this court. On 2 December 1985 Virginia Beach moved to consolidate the two actions and to realign the parties according to their interest. On 17 December 1985 the motion was denied inasmuch as Virginia Beach had already intervened in this action and the claims and parties in each case were identical. The Virginia Beach action was dismissed, but all discovery previously conducted was made a part of this action.

On 12 December 1985 the Corps of Engineers filed the administrative record with the court. On 17 December 1985 the court suspended all discovery and ruled that judicial review of the Corps' actions would be confined to the administrative record consistent with the Administrative

Procedure Act, 5 U.S.C.A. § 706(2)(A) (West 1977).

Disputes concerning the contents of the record were resolved by the 28 March 1986 order of the court which allowed limited supplementation of the record.

Virginia Beach has subsequently submitted a "Supplement to Virginia Beach's Response to Plaintiffs' Motions for Summary Judgment" in which it asks the court to consider Midkiff Affidavit, Exhibit G, an exhibit which is not part of the administrative record, for the limited purpose of impeaching arguments made by North Carolina and RRBA. The motion is denied. RRBA's motion to supplement the record with the same exhibit is also denied.

II. APPLICABLE STATUTES AND REGULATIONS

Four statutes and their implementing regulations are pertinent in this judicial review proceeding: The Rivers and Harbors Appropriation Act of 1899, 33 U.S.C.A. § 403 (1986); the Clean Water Act, 33 U.S.C.A. §§ 1251-1376

(1986); the Water Supply Act of 1958, 43 U.S.C.A. §§ 390b-390f (1986); and the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C.A. §§ 4321-4347 (1977). Pursuant to section 10 of the Rivers and Harbors Act of 1899, 33 U.S.C.A. § 403 (1986), the Corps of Engineers is responsible for evaluating proposed construction projects in the navigable waters of the United States. Section 404 of the Clean Water Act, 33 U.S.C.A. § 1344 (1986), gives the Corps jurisdiction to issue permits for the discharge of dredged or fill materials into the navigable waters of the United States. The Water Supply Act authorizes the Corps to reallocate water storage in federal reservoirs such as Kerr Reservoir. 43 U.S.C.A. § 390b (1986). In exercising the authority granted by these three statutes, the Corps must also comply with the prerequisites of NEPA.

A. NEPA

Congress enacted NEPA to oblige federal agencies to consider the environmental consequences of proposed actions

in the decision-making process, thereby insuring "fully informed and well-considered" decisions. Stryker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 228 (1980) (per curiam), quoting Vermont Yankee Nuclear Power Corp. v. National Resources Defense Council, Inc., 435 U.S. 519 (1978). Pursuant to section 102(2)(C) of the Act, 42 U.S.C.A. § 4332(2)(C), a federal agency has the duty to prepare a detailed environmental statement, known as an environmental impact statement (EIS), on every major federal action significantly affecting the quality of the human environment. In order to determine which actions trigger this provision, the Corps has promulgated regulations to implement NEPA, 33 C.F.R. pt. 230 (1986). The Corps is simultaneously governed by the Council on Environmental Quality (CEQ) regulations construing and implementing NEPA, 40 C.F.R. pts. 1500-1508 (1986).

These implementing regulations outline Corps procedure for evaluating a proposal. Before issuing a permit the Corps must prepare an environmental assessment (EA) to determine whether the proposed action would significantly affect the quality of the human environment, thereby requiring preparation of a comprehensive EIS. 33 C.F.R. pt. 230, app. B(8)(a). Typically the EA is a brief evaluation, normally not exceeding fifteen pages, of the likely environmental effects of a proposal, the need for and the alternatives to the proposed action. 33 C.F.R. § 230.9(c) and 33 C.F.R. pt. 230, app. B(8)(a). When the district engineer concludes that a project will not significantly affect the quality of the human environment, he must prepare a FONSI presenting the reasons for this conclusion. 33 C.F.R. § 230.10 and 33 C.F.R. pt. 230, app. B(8)(c).

Section 102(2)(E) of NEPA, 42 U.S.C.A. § 4332(2)(E), requires the federal agency to "study, develop and describe appropriate alternatives" to recommended

courses of action in any proposal involving unresolved conflicts concerning alternative uses of available resources. This provision is independent of the standard triggering preparation of an EIS and is not limited to proposed major actions significantly affecting the quality of the human environment. River Road Alliance, Inc. v. Corps of Engineers of United States Army, 764 F.2d 445 (7th Cir. 1985), cert. denied, ___ U.S. ___, 106 S.Ct. 1283 (1986); City of New York v. United States Department of Transportation, 715 F.2d 732 (2d Cir. 1983), cert. denied, 465 U.S. 1055 (1984). However, the smaller the impact of the proposed action, the less extensive the search for alternatives is to be expected of the agency. River Road Alliance, Inc., 764 F.2d at 452.

B. PUBLIC INTEREST REVIEW
AND OTHER CORPS REGULATIONS

In addition to the regulations implementing NEPA, the Corps has adopted regulations which serve as guidelines

for the evaluation of all regulatory permit applications. 33 C.F.R. pt. 320 (1986). Chief among these regulations is 33 C.F.R. § 320.4(a) which requires the Corps to undertake a general "public interest review" to decide whether a permit should issue. In this review the Corps must evaluate a proposal's overall impact on the public interest, balancing the "benefits which reasonably may be expected to accrue . . . against its reasonably foreseeable detriments." 33 C.F.R. § 320.4(a).

In weighing the public interest, the Corps is to evaluate the following general criteria: (1) the relative extent of a public and private need for the proposed project; (2) where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed project; and, (3) the extent and permanence of the beneficial and/or detrimental effects which the proposed project may have on the public and private uses to which the area is suited. 33

C.F.R. § 320.4(a)(2). Furthermore, all factors which may be relevant to the proposal must be considered, including but not limited to "conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people." 33 C.F.R. § 320.4(a)(1).

The decision whether to issue the permit depends on the outcome of this balancing of factors. A permit is to be granted unless the district engineer determines that it will be contrary to the public interest.⁶ 33 C.F.R. § 320.4(a)(1).

⁶ This is the current language of the public interest regulation as amended on October 5, 1984. 49 Fed. Reg. 39478. At the time of the Corps' decision the regulation provided that a permit would issue if the Corps found the project to be in the public interest. 47 Fed. Reg. 31794 at 31804 (July 22, 1982). However, the original and revised regulations "describe the same public interest balancing process." 49 Fed. Reg. 39478.

When the decision on the permit application is made the district engineer must include the results of his public interest review in the Statement of Findings, a document which must be prepared in all permit decisions not requiring preparation of an EIS. 33 C.F.R. § 325.2(a)(6) (1986).

Corps regulations require that the district engineer consult with the directors of the United States Fish and Wildlife Service, the National Marine Fishery Service and the agency responsible for wildlife for the state in which the work is to be performed and accord "great weight" to their views on fish and wildlife conservation. 33 C.F.R. § 320.4(c); Hough v. Marsh, 577 F. Supp. 74, 81 (D.Mass. 1982). Also the district engineer must consider all comments received in response to public notice regarding the permit application. 33 C.F.R. § 325.2(a)(3). Due consideration must also be given to the official views of the state, regional or local agencies having an interest over the particular activity as "a reflection of local factors of the public

interest." 33 C.F.R. § 320.4(j)(1). The district engineer must conduct an independent evaluation of the permit application and be responsible for the accuracy of information submitted by the applicant. 33 C.F.R. pt. 230, apps. B(3) and (8)(b).

III. CONTENTIONS

North Carolina and RRBA do not challenge the Corps' jurisdiction to issue the permit and enter into the water supply reallocation contract pursuant to the above cited statutes. Instead, they argue that both of the Corps' decisions were arbitrary and capricious and should be set aside on several independent grounds. Generally North Carolina and RRBA contended that the Corps' consideration of the permit application and water supply contract were conducted in a biased manner and were result oriented. Furthermore, they contend that both conclusions ran counter to the evidence in the record because the Corps ignored relevant factors,

misconstrued the law and misapplied the regulations regarding NEPA and the public interest review.⁷

Specifically, North Carolina and RRBA contend that the Corps' public interest review in evaluating the permit application was arbitrary and capricious because the Corps:

- (1) failed to assess the public need for the pipeline project;
- (2) failed to determine the practicability of reasonable alternatives and methods to supply the water needs of Virginia Beach and South Hampton Roads;
- (3) failed to consider the extent of permanence of the project's effects on other uses;
- (4) failed to weigh the public interest as it relates to effects on fish and wildlife, water quality, riparian rights of adjacent landowners, and effects on the coastal zone; and,
- (5) failed to assess the long-term water supply needs of the

⁷ Contentions raised by RRBA and North Carolina in their complaints not specifically addressed in their briefs are deemed abandoned.

Roanoke River Basin and Southside Hampton Roads⁸ and the effects of conservation on the public interest. North Carolina and RRBA also contend that the Corps' consideration of NEPA issues was arbitrary and capricious. They contend that the FONSI was arbitrary and capricious because: (1) the project would seriously harm water quality in the Roanoke River Basin; (2) the Corps failed to study the pipeline's effect on striped bass; and, (3) the Corps failed to employ the required "worst case analysis." North Carolina and RRBA also contend that the Corps' issuance of the permit was arbitrary and capricious because the Corps failed to analyze alternatives to the project as required by 42 U.S.C.A. § 4332(2)(E) and Corps regulations. North Carolina and RRBA also challenge the Corps' decision to enter into the water supply reallocation contract on the

⁸ "Southside Hampton Roads" refers to Southeastern Virginia, including Norfolk, Portsmouth, Chesapeake, Virginia Beach, Suffolk, Franklin, Isle of Wight County and Southampton Counties.

following grounds: (1) the Corps' finding of no significant impact was arbitrary and capricious; (2) the Corps failed to consider alternatives to the water supply contract; and, (3) the Corps acted in violation of law by becoming a partisan in a water dispute between Virginia and North Carolina.

IV. STANDARD OF REVIEW

The applicable review standard is found in the Administrative Procedure Act which provides in pertinent part:

The reviewing court shall--

(2) hold unlawful and set aside agency action, findings, and conclusions found to be--

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(D) without observance of procedure required by law.

5 U.S.C.A. § 706(2)(A) & (D) (West 1977). Any interpretation of this standard must begin with the Supreme

Court's decision in Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402 (1971). In Overton Park the Supreme Court made clear that the court's obligation pursuant to this statute is twofold. The court must consider, first, whether the agency acted within the scope of its authority and, second, whether the actual choice made by the agency was arbitrary, capricious an abuse of discretion, or otherwise not in accordance with law. To make this finding the court must consider whether the decision was based on a consideration of the relevant factors and whether there was a clear error of judgment. This standard of review is highly deferential and the agency decision is "entitled to a presumption of regularity." Overton Park, 401 U.S. at 415.

The agency must examine the relevant data and articulate a satisfactory explanation for its action, including a "rational connection between the facts found and the choice made." Bowman Transportation, Inc. v. Arkansas-Best Freight System, Inc., 419 U.S. 281, 285 (1974), reh'g

denied, 420 U.S. 956 (1975), quoting Burlington Truck Lines, Inc. v. United States, 371 U.S. 156, 168 (1962).

Furthermore, the court may not supply a reasoned basis for the decision that the agency has not given. Bowman Transportation, 419 U.S. at 285-286. In Motor Vehicles Manufacturers Ass'n of the United States, Inc. v. State Farm Mutual Auto Insurance Co., 463 U.S. 29, 43 (1983), (State Farm) the court said:

[A]n agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

In reviewing whether the agency has complied with the requirements of NEPA, the only role for the court is to insure that the agency has taken a "hard look" at the environmental consequences; it cannot "interject itself within

the area of discretion of the executive as to the choice of the action to be taken." Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976). In enacting NEPA, Congress did not require agencies to elevate environmental concerns over other appropriate considerations. Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87 (1983). In applying the arbitrary and capricious standard to NEPA determinations the court must engage in a substantial inquiry to determine whether the agency, in its conclusions, made a good faith judgment, after considering all relevant factors, including possible alternative or mitigative measures. Coalition for Responsible Regional Development v. Coleman, 555 F.2d 398 (4th Cir. 1977). In passing on the good faith issue, the court may not substitute its judgment for that of the agency but must only look to see that the official or agency took a hard look at all relevant factors. In considering alternatives, the agency need only set forth those

alternatives sufficiently to permit a reasoned choice.⁹

Coleman, 555 F.2d at 400.

V. ANALYSIS

A. FINDING OF NO SIGNIFICANT IMPACT

The Corps of Engineers is required by NEPA to prepare a detailed EIS in all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C.A. § 4332 (2)(C). The Norfolk District Engineer found that the pipeline project would have no significant effects on the environment and determined that an EIS was not required. North Carolina and RRBA contend

⁹ Both North Carolina and RRBA have cited cases from other circuits which apply a "reasonableness" standard of review to agency decisions not to prepare an EIS. The Fourth Circuit has not departed from the arbitrary and capricious standard in reviewing such determinations. *Providence Road Community Ass'n v. Environmental Protection Agency*, 683 F.2d 80, 82 n.3 (4th Cir. 1982). However, the court sees little difference between the undertaking required pursuant to the "arbitrary and capricious" standard and the "reasonableness" standard. See *City of Alexandria, Virginia v. Federal Highway Administration*, 756 F.2d 1014, 1017 (4th Cir. 1985). Contra, *River Road Alliance, Inc. v. Corps of Engineers of United States Army*, ___ U.S. ___, 106 S.Ct. 1283 (1986) (White, J., dissenting from denial of writ of certiorari).

that the Corps' FONSI was arbitrary and capricious because the record demonstrates that a 60 mgd withdrawal would serious harm water quality in the Roanoke River and the Corps failed to adequately assess the project's impact on striped bass spawning in the river.

The court need not dwell on whether the Corps' decision to issue the pipeline construction permit was a "major federal action" within the bounds of the EIS requirement of NEPA. In all its decision documents, the Corps assumed the project was major and devoted its energies to evaluating the significance of any impacts on the environment. The federal defendants do not contest the assertion that the project constitutes major federal action.¹⁰

¹⁰ Virginia Beach argues in a footnote in their original memorandum that as a matter of law the Corps' permit and contract decisions were not major federal actions because although Virginia Beach's project is major, the federal actions are only incidental. Whether an agency decision constitutes major federal action depends on the facts of each case. *Rucker v. Willis*, 484 F.2d 158, 162-63 (4th Cir. 1973). CEQ regulations provide that "major" has no meaning independent of "significantly" as defined in 40 C.F.R. § 1508.27. 40 C.F.R. § 1508.18. Issuing a permit for construction of the pipeline is undoubtedly

Therefore, the court moves directly to the issue of significant impact.

To provide agencies with some guidance for determining which impacts are "significant," the Council on Environmental Quality (CEQ) adopted regulations defining the term. 40 C.F.R. § 1508.27. The statutory concept of significant impact requires consideration of both the context and intensity of impacts. In evaluating intensity of impact agencies are directed to weigh ten specific factors. 40 C.F.R. § 1508.27(b)(1)-(10). The ultimate determination of significance requires comparison of "whether the time and expense of preparing an environmental impact statement are commensurate with the likely benefits from a more searching

federal action. See *Rucker v. Willis*, 484 F.2d at 163. The court assumes, as the Corps did, that its action in granting the permit was "major." Since lake levels and flows in the Roanoke River system are federally regulated and must be operated under the jurisdiction of the Corps of Engineers, any other conclusion would be illogical. For a discussion of "major" federal action see *River Road Alliance, Inc. v. Corps of Engineers of United States Army*, 764 F.2d 445, 450 (7th Cir. 1985), cert. denied, ___ U.S. ___, 106 S.Ct. 1283 (1986).

evaluation than an environmental assessment provides."

River Road Alliance, Inc. v. Corps of Engineers of United States Army, 764 F.2d 445, 449 (7th Cir. 1985), cert. denied, ___ U.S. ___, 106 S.Ct. 1283 (1986).

The court will now evaluate plaintiffs' specific contentions on why an EIS is required.

1. Water Quality

North Carolina and RRBA argue that the finding of no significant impact was arbitrary and capricious because a withdrawal of 60 mgd would adversely affect water quality in the Roanoke River. The Corps found that the 60 mgd withdrawal would have no noticeable impact on downstream water quality. North Carolina and RRBA contend that this conclusion was based on two propositions which warrant a remand of the determination: First, the Corps relied on average flows rather than analyzing low flow conditions in the Roanoke River; and second, the Corps relied on the

existence of Federal Energy Regulatory Commission (FERC) minimum flow requirements to guarantee water quality in the river.

North Carolina argues that reliance on average flows to determine water quality impacts is "misplaced" because water quality analysis must be based on low flow (drought) conditions. When the amount of water in the river is at its lowest point pollutants are at their greatest concentration because the amount of water available to dilute them is limited. At a time of drought when Virginia Beach would make its greatest demands on the river, these circumstances would be at their most extreme. Corps' reliance on annual average flows is allegedly faulty because average flows are largely influenced by flood conditions. Thus, it is argued, average flows are irrelevant to the determination whether water quality would be affected by a 60 mgd withdrawal during the critical periods of drought.

Had the Corps relied solely on average flows in reaching its water quality determination, this argument might be more persuasive. However, the Corps not only considered impacts of the withdrawal on average flows of the river but also impacts based on FERC mandated minimum flows. Furthermore, average flows are not irrelevant as urged by North Carolina because in regulated streams, like those in the Roanoke River system, flood waters can be and are stored for release later during low flow periods.

Virginia Electric and Power Company (VEPCO) operates hydropower facilities at the end of Gaston and Roanoke Rapids Lakes. VEPCO's procedure is to allow water to accumulate in the lakes during times of off-peak power demand and then release water through its generators during peak periods of demand. VEPCO's FERC license for Roanoke Rapids Dam requires that it release certain minimum instantaneous flows and quantities of dissolved oxygen downstream to maintain adequate water quality

standards below the dam despite its power generation needs. The standards require that VEPCO release at least 1,000 cubic feet per second (cfs) from November through March, 1,500 cfs in April and October and 2,000 cfs from May to September. To insure that there is sufficient water in Roanoke Rapids lake for VEPCO's releases, the Corps has established operating rules to release water from its impoundment in Kerr Lake into Lake Gaston and, in turn, into Roanoke Rapids Lake.

In analyzing the water quality impacts of a 60 mgd withdrawal, the Corps recognized that the City's proposed project would not affect FERC mandated minimum releases downstream. The Corps also analyzed actual flows for the 1983 year and superimposed the hypothetical 60 mgd withdrawal on the figures. It determined that there were only fourteen times when flows were within 60 mgd of FERC mandated minimums which would have caused fourteen days of minimum regulated flows. The Corps found

that the greatest effect the City's proposal would have on water quality would be to increase the number of days which low flows would occur. The conclusion was that such an impact would be insignificant.

North Carolina gives four reasons why the Corps' reliance on FERC mandated minimum flows to protect downstream water quality was arbitrary and capricious. First, North Carolina argues that the standard is outdated because minimum levels were determined more than twenty-six years ago. However, no evidence was presented to the Corps by comment or otherwise to indicate that FERC minimum standards no longer insure acceptable conditions in the river other than North Carolina's assertion that a 26-year-old standard must be outdated. Moreover, in regulating water quality through the National Pollution Discharge Elimination System, North Carolina determines the maximum pollutant discharges allowable by industries and municipalities in the river based on FERC regulated

minimum flows for the month of October. Second, North Carolina argues that the Corps assumed that reducing flows to a minimum level for extended periods would pose no environmental effects. "If increased frequency and prolonged duration of low flows may have an effect on the environment, then an EIS is required. . . ." Memorandum of North Carolina in support of its motion for summary judgment at 37. However, North Carolina misconstrues the law. The Corps examined the impacts of increased periods of low flow and deemed them to be insignificant. Only a finding of significant impact warrants preparation of an EIS. Providence Road Community Association v. Environmental Protection Agency, 683 F.2d 80 (4th Cir. 1982); see § IV, supra.

Third, North Carolina argues that the Corps failed to consider additional withdrawals in the Roanoke River Basin for irrigation and industrial purposes. However, the Corps considered these potential withdrawals. The Corps

considered North Carolina irrigation projections and found the anticipated impact of the withdrawals to be insignificant. Furthermore, the Corps was made aware that Champion International Corporation was contemplating building a pulp mill on the Roanoke River and VEPCO was considering building a power plant which would use water in the Roanoke River Basin. Both companies were uncommitted to these projects and the Corps found the impacts of these potential projects to be unforeseeable. North Carolina argues that failure to consider these potential withdrawals was arbitrary and capricious while RRBA argues that it is evidence of the Corps' biased and unevenhanded approach in considering the water needs of the competing users. Neither argument is persuasive. The Corps is not required to speculate concerning impacts which are not foreseeable, and the agency's determination that these future withdrawals were not foreseeable was not arbitrary and capricious or an abuse of discretion. See cf. Coalition for Responsible Regional

Development v. Coleman, 555 F.2d 398, 400 (4th Cir. 1977) (court is not to fault an agency for failure to consider an alternative whose effect cannot be reasonably ascertained). Furthermore, the allegations of bad faith are not supported by the Corps' intensive review as evidenced by the record. See V(D), infra.

Fourth, North Carolina argues that the Corps' reliance on FERC minimums to protect water quality was unreasonable because the lower Roanoke River and Albemarle Sound were already faced with serious water quality problems. The Corps considered downstream water quality effects and found that approximately 1% less water would be available for dilution of downstream pollutants. This was considered to be insignificant. Furthermore, the Corps analyzed the impact of the City's project on Albemarle Sound and concluded that it should not be significantly affected.

~~The~~ above analysis makes clear that the Corps took a "hard look" at the environmental consequences of the Virginia Beach project as they relate to water quality and concluded that no significant impacts were expected. Nothing more is required. Kleppe v. Sierra Club, 427 U.S. at 410 n.21 (1976). The relevant factors were considered, and there was no clear error of judgment. See, Citizens to Preserve Overton Park v. Volpe, 401 U.S. at 417; Coalition for Responsible Regional Development v. Coleman, 555 F.2d at 422.

2. Striped Bass Spawning

North Carolina and RRBA also challenge the FONSI as arbitrary and capricious because the Corps allegedly failed to adequately assess the effects of a 60 mgd withdrawal on striped bass spawning in the Roanoke River Basin. Striped bass migrate up the Roanoke River every spring to spawn in the vicinity of Weldon, North Carolina. Successful spawning

requires higher than normal river flows to keep the eggs buoyant until they are hatched. "Striped bass spawn more successfully when there is a lot of flow in the river than when there is very little flow" Norfolk Record 70, EA at 3.

Anadromous striped bass populations have declined in the last several years throughout the East Coast and in the Roanoke River Basin. In order to protect the species in the Roanoke River, VEPCO, the Corps of Engineers and the North Carolina Wildlife Resources Commission in 1971 executed a Memorandum of Understanding for the regulation of augmentation flows from Kerr Reservoir.¹¹ The Memorandum of Understanding provides that pursuant to VEPCO's FERC license the minimum flows released by

¹¹ For nine years prior to the 1971 agreement, the North Carolina Wildlife Resources Commission, VEPCO, and the Corps and the Southeastern Power Administration negotiated a contract for regulation of augmentation flows each year. The Memorandum of Understanding was executed to avoid the cumbersome paperwork involved in negotiating an agreement each year which generally resulted in the same fish flow augmentation.

VEPCO from Roanoke River Reservoir will be augmented by water from Kerr Reservoir in an amount determined by the Corps of Engineers to be sufficient to maintain a minimum stage of thirteen feet on the river gauge at Weldon (approximately 6,000 cfs). The augmentation flows are required to begin on or about 26 April and continue through the spawning season, but no later than 15 June, provided that storage is available for the releases in Kerr Reservoir. "Exact dates are determined by North Carolina fishery biologists." Norfolk Record 70, EA at 7. This spawning period is roughly fifty days.

In addressing this matter in the EA, the Norfolk District Engineer said:

Striped bass migrate up the Roanoke River every spring to spawn. Successful spawning requires higher-than-normal river flows to keep the eggs buoyant until they hatch. For this purpose, the Corps stores extra water in the early spring, when it is available, to release beginning around April 26 and ending around June 15. This period of roughly 50 days is a "window" which should cover most

annual spawning and hatching periods. Exact dates are determined by North Carolina fishery biologists. The water released by the Corps during this period results in a flow at Weldon, North Carolina of 6000 cfs, or a river stage elevation of 13. The City's intake would, under worst-case conditions, eliminate two days from the end of the 50-day augmented flows. This condition would be expected to occur four times in 100 years. In one year out of four, one day would be lost at the end of the 50-day augmented flow period. This worst-case condition assumes the maximum, 60 MGD withdrawal, which is not projected to be reached until the year 2030. A two percent loss in potential spawning time once every four years is not considered significant, nor is a four percent loss once every 25 years, in part because a number of variables other than river flow are thought to influence striped bass spawning and survival. (emphasis added)¹²

Plaintiffs contend that the above finding is arbitrary and capricious because it is based on the false assumption that the augmentation flow-releases were being met, as shown by the emphasized portion of the quote. Plaintiffs

¹² The Corps footnoted the Virginia Beach Study as the source of its information.

further argue that in fact the spawning flows were released by the Corps for the entire 50-day spawning season in only 21% of the years from 1955 to 1982 or 6 out of 28 years. During the other 22 years spawning flows were released for shorter periods during the spawning season.¹³ Therefore, the "worst-case" analysis was incorrect because the flows were not actually being augmented for the entire 50-day

¹³ Since 1971 when the Memorandum of Understanding was executed spawning discharges from Kerr Reservoir necessary to maintain a river stage of 13 feet in the spawning area were made as follows:

<u>Year</u>	<u>No. of Days of Releases</u>
1971	50
1972	47
1973	50
1974	47
1975	49
1976	31
1977	31
1978	50
1979	49
1980	46
1981	9
1982	50

Exhibit K to the Administrative Record, Hume Affidavit at 16.

period. The FONSI was, therefore, based on a materially incorrect premise.

In its comments to the Corps the North Carolina Wildlife Resources Commission expressed concern over the Corps' failure to release these flows from Kerr Reservoir:

The striped bass is an important sport and commercial fish and is very important to the economy of the entire Roanoke Basin within North Carolina. A recent analysis of release flows from Kerr Reservoir indicates that sufficient water to supplement striped bass spawning in the Roanoke River below Roanoke Rapids Dam for the full 50 days of the spawning period has been available only for six of the last 28 years. This means that, under current conditions, water is available for the full 50-day spawning period only 21 % of the time. It should be emphasized that the water stored in Kerr Reservoir between elevations 300 and 302 feet is used to supplement river flows when they are less than the 6,000 cfs minimum required for striped bass spawning. This minimum flow occurs each weekend and at other times when power demand is low. The supplemental water is not used to provide desired or optimum spawning flows. These occur only under flood conditions when the reservoirs are full and overflowing. Any additional withdrawals or reallocations of water that

reduce either the quantity or duration of flows available to striped bass for spawning will have further serious impacts upon the striped bass resource.

Norfolk Record 178 at 2. The Corps responded to these comments by saying: "North Carolina has correctly pointed out that the Corps is often not able to maintain the 6,000 cfs released for the entire 50-day period. This is an existing condition, and would presumably persist even without this project." Norfolk Record 74, SOF at 3.

The federal defendants and Virginia Beach respond to these arguments by asserting that the exact length of releases of augmentation flows are determined by North Carolina fishery biologists. Therefore, whenever the Corps failed to release the augmented flows for the entire 50-day period, the striped bass were presumably no longer spawning and the augmented flows curtailed. However, no data appears in the record to support such a rationalization. The Corps never offered this explanation in the face of North Carolina's

comments but merely admitted that it was often unable to maintain the 6,000 cfs release for the entire 50-day period. The agency must examine the relevant data and articulate a satisfactory explanation for its action, including a "rational connection between the facts found and the choice made." Burlington Truck Lines, Inc. v. United States, 371 U.S. 156, 168 (1962). The reviewing court may not supply a reasoned basis for the decision which the agency itself has not given. State Farm, 463 U.S. at 43 (1983). Defendants' arguments are further discredited by the fact that the "fishery biologists" charged with responsibility for determining the exact periods of augmentation releases are members of the North Carolina Wildlife Resources Commission, the very agency who complained to the Corps that it was not releasing adequate augmentation flows.

The Corps is only required to release augmentation flows when water storage is available in Kerr Reservoir. While the Corps may not have failed to meet its obligation

pursuant to its contract with VEPCO and the North Carolina Wildlife Resources Commission, it based its FONSI on the premise that such releases were being made for a 50-day spawning period each year. When presented with evidence to the contrary, the Corps offered an inadequate response. It is no explanation that the condition would exist with or without the project.

The Corps conducted no independent analysis of the pipeline's effects on striped bass but relied on Virginia Beach's worst-case conclusions. While the Corps may utilize reports and facts derived from reports supplied by the applicant, it is responsible for the independent verification of specifically challenged information supplied by the applicant or outside consultants. 33 C.F.R. § 230, apps. B(3) and B(8)(6); Van Abbema v. Fornell, 807 F.2d 633, 639 (7th Cir. 1986). If the Corps bases its conclusions on false premises or information even when its attention is directed to possible defects in the analysis, its conclusion cannot be

described as reasoned. Sierra Club v. United States Army Corps of Engineers, 701 F.2d 1011, 1035 (2d Cir. 1983). There is no indication in the record that the Corps verified the information as submitted by Virginia Beach. Furthermore, there is no evidence in the record that the Corps conducted any independent investigation regarding the pipeline's effect on the striped bass.

The Corps can find no comfort in the fact that neither the United States Fish and Wildlife Service nor the National Marine Fishery Service expressed the opinion that the pipeline permit should be denied or that an EIS should be prepared. Both agencies based their determinations upon a review of the final environmental assessment and FONSI which were based on the worst-case analysis. See Norfolk Record 249 & 250. Despite the fact that both agencies concurred in the FONSI, they expressed extreme reservations considering the Corps' analysis. For example, the National Marine Fishery Service stated as follows:

The National Marine Fishery Service (NMFS) has reviewed the subject document and concurs with your Finding of No Significant Impact. However, as stated in our October 14, 1983, letter, the NMFS remains concerned about the impact of the City's water withdrawal on striped bass spawning which occurs downstream of the Roanoke Rapids Dam. While we realize that the analysis presented in the assessment indicates that the project will have minimal impacts to spawning striped bass, we are of the opinion that even this small loss could be eliminated. Perhaps it would be possible to enhance the releases for this species. Therefore, we reiterate our earlier request that a group of state and federal resources agencies, including the North Carolina Division of Marine Resources, be formed to review this situation and recommend an appropriate release schedule to protect, and perhaps enhance, this resource.

Norfolk Record 250; see also Norfolk Record 229.

Similarly, the United States Fish and Wildlife Service commented on three occasions that the issue of minimum instream flow needs for fish and wildlife in the Roanoke River Basin had been inadequately addressed in the draft and final environmental assessments. Norfolk Record 114, 226

& 249. The Corps is required to consult with these agencies with the view to the conservation of wildlife resources to prevent their direct and indirect loss and damage due to the proposed activity in the permit application. "The Army will give full consideration to the views of those agencies on fish and wildlife considerations in deciding on the issuance, denial, or conditioning of individual or general permits." 33 C.F.R. § 320.4(c). However, the Corps did not adequately respond to the comments made by the Fish and Wildlife Service or the National Marine Fishery Service.

The court also notes that North Carolina called to the Corps' attention that even the FERC-mandated river flows were not always met. The Corps' response was "[t]his is a matter which the State should refer to VEPCO and FERC, for it has nothing to do with the Corps or this proposed project." SOF at 4. No attempt was made by the Corps to relate any such failure, together with the proposed

withdrawal, on striped bass during their critical spawning season.

NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action. Baltimore Gas & Electric Co. v. National Resources Defense Council, Inc., 462 U.S. 87 (1983). The role of the court in reviewing agency decisions is to ensure that the agency has adequately considered the environmental impact of the proposed action and that the decision is not arbitrary and capricious. The court cannot accept as reasoned a decision that was based on incorrect or misleading information, especially when it implicates impacts on a declining species such as the striped bass. This is particularly true when it is derived from the applicants unverified analysis in the face of specific objections regarding the facts upon which the analysis was derived. Specific challenges require specific responses or a

determination that the information was not relied upon. See, e.g., Van Abbema v. Fornell, 807 F.2d at 639.

Based on the foregoing, the court holds that the FONSI as it relates to striped bass was arbitrary and capricious. This determination is not to suggest that the court is of the opinion that the project's impact on striped bass would be significant or that an EIS is required. That decision is uniquely within the province of the Corps once it takes a "hard look" at the environmental consequences of the Virginia Beach project on striped bass.¹⁴

3. Other NEPA Considerations

North Carolina and RRBA attack the FONSI as arbitrary and capricious on several other less significant grounds. First, North Carolina argues that the Corps failed

¹⁴ The Corps should at a minimum, however, consider the FERC-mandated flows and the augmentation flows in making a determination of the probable effect of the proposed withdrawal on striped bass during the spawning season.

to perform a "worst-case" analysis with respect to the potential water quality impacts that may result from potential VEPCO and Champion plants in the Roanoke River Basin and other future water usages downstream. Corps regulations provide that "where relevant information is missing or incomplete and the costs of obtaining it are exorbitant or the means to obtain it are not known, the district engineer should include a "worst-case" analysis. . . ." 33 C.F.R. pts. 230, app. b(3).¹⁵ As discussed earlier, the Corps determined that such withdrawals were not reasonably foreseeable. That decision was reasonable and is supported by the record. Information that is unforeseeable is not "relevant" or "missing" as contemplated by the worst-

¹⁵ This regulation is based upon CEQ regulations found in 40 C.F.R. § 1502.22. The CEQ regulations have now been amended to eliminate the worst-case analysis. The new regulation still requires an analysis of "reasonably foreseeable" significant adverse impacts on the human environment, including "impacts which have catastrophic consequences, even if the probability of occurrence is low." 40 C.F.R. § 1502.22 (1986).

case regulations. Therefore, a worst-case analysis was not required.

In addition to the foregoing arguments, RRBA argues that the Corps inadequately considered the factors that it is required to weigh in determining the significance of impacts. 40 C.F.R. § 1508.27. In particular, RRBA argues that the Corps failed to consider "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial." 40 C.F.R. § 1508.27(b)(4). There can be no doubt that this project is highly controversial. The tenor of comments expressed in writing and at the three public hearings attests to the fact that this project is hotly debated. However, the core of the controversy relates to the advisability and legality of the interbasin transfer of water and the socioeconomic impacts of such a decision. See § V(B)(2), infra. The high degree of controversy generated by the application does not concern the project's effects on the human environment although some environmental objections

were raised. See River Road Alliance, Inc., 764 F.2d at 451 (public opposition cannot tip the balance if the environmental impacts are deemed insignificant). Therefore, the Corps' treatment of this factor was reasonable and supported by the record.

RRBA further argues that the Corps failed to consider the degree to which the decision sets a precedent for future interbasin transfers of water. 40 C.F.R. § 1508.27(b)(6). However, the Corps considered this factor and weighed its significance. The Corps' consideration of this factor was not arbitrary and capricious or an abuse of discretion.

To the extent that North Carolina or RRBA has raised other arguments that the FONSI was arbitrary and capricious and that an EIS should be required, the court has considered those arguments and finds them to be unpersuasive. In all other respect the Corps' decision was reasonable and supported by the record.

B. PUBLIC INTEREST REVIEW

A FONSI does not end the Corps' responsibilities in considering permit applications. Corps regulations require that a permit shall issue only after a general public interest review wherein the benefits of the project are weighed against its foreseeable detriments. 33 C.F.R. § 320.4(a)(1). North Carolina and RRBA contend that the Corps did not adequately weigh various factors in striking the public interest balance.

1. Need and Alternatives

Chiefly, North Carolina and RRBA allege that the Corps never evaluated "the relative extent of the public and private need for the proposed structure or work." 33 C.F.R. § 320.4(a)(2)(i). Instead, the Corps determined that Virginia Beach will demand 48 mgd of water by the year 2030 with 12 mgd for the use of other localities in the region. The Corps then determined that the applicant's entire demand

should be supplied from Lake Gaston because Virginia Beach desired a new and autonomous source. As a result the Corps never considered supplies currently available to Virginia Beach to meet its water needs. Stated differently, the City's "need" was considered to be all the water it would use in the next fifty years and not merely the additional water it will need beyond supplies which are currently available.

Virginia Beach presently buys its water from the Norfolk system. The Virginia Beach contract with Norfolk provides that Norfolk will supply Virginia Beach with its "surplus." It is clear from the record that no analysis of Norfolk's available surplus was conducted or projected by the applicant or by the Corps of Engineers. See Norfolk Record 258, Virginia Beach Study at 18. While there is relative agreement over projected water demand between the parties North Carolina and RRBA have vigorously and continuously disputed Virginia Beach's assertion that supply in Southeastern Virginia is inadequate to meet its demand.

Both plaintiffs have submitted supply figures which they contend prove that an actual surplus of water exists to more than adequately meet Southeastern Virginia's demand. The Corps rejected these arguments as does the court. The 1980-81 drought clearly demonstrated that Southeastern Virginia has an inadequate water supply, and it needs additional water from another source. The question remains, however, "how much water does Virginia Beach need?" In the administrative review context this issue becomes whether the Corps adequately considered the extent of the need for the project in its public interest review.

The federal defendants and Virginia Beach respond to plaintiffs' arguments with several of their own. They argue that need is to be expressed in broad, generic terms citing a regulation addressing the organization and content of a draft EIS:

[E]very application has both an applicant's purpose and need and a public purpose and need. These may be the same when the

applicant is a governmental body or agency. In most instances when an EIS is required and the applicant is not a governmental body or agency, the applicant is a member of the private sector engaged in providing a good or service for profit. At the same time, the applicant is requesting a permit to perform work which, if approved, is considered in the public interest (i.e., provides a public benefit). This public benefit shall be stated in as broad, generic terms as possible. . . .

33 C.F.R. pt. 230 app. B § 11b(4). Thus, Virginia Beach's need is described as the need for water, and where the water is to come from is a question of alternatives as distinguished from need. Defendants' reliance on this section of the regulations is misplaced, as it deals with the organization and content of an EIS, not the public interest review.

Defendants contend that alternatives need not be addressed at all pursuant to Corps regulations. The court disagrees. Two separate provisions require consideration of alternatives in the analysis of Corps permit applications. First, Corps regulations provide "[w]here there are unresolved conflicts as to resource use, the practicability of

reasonable alternative locations and methods to accomplish the objective of the proposed structure or work" must be considered. 33 C.F.R. 320.4(a)(2)(ii). Section 102(2)(E) of NEPA similarly requires all federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C.A. § 4332(2)(E). Such an analysis is independent of NEPA's EIS requirement and must be conducted whether or not a project's impacts are deemed significant. See § II(B), supra. The federal defendants and Virginia Beach contend that no consideration of alternatives is required because there are no "unresolved conflicts as to resource use" but this argument is untenable as such conflicts form the very basis of this controversy.¹⁶ For at the

¹⁶ Virginia Beach contends that *Webb v. Gorsuch*, 699 F.2d 157 (4th Cir. 1983) stands for the proposition that a finding of no significant environmental impact obviates the necessity to consider alternatives to proposed action. However, there the court apparently was not called upon to examine 42 U.S.C.A. § 4332(E). Furthermore, it was dealing

bottom of this controversy the real dispute is over who is entitled to the use of the water, Virginia Beach or the Basin. In addition, section 320.4(a) specifically requires the Corps, in its public interest review, to engage in a balancing process reflecting the national concern for both protection and utilization of important resources, including "water supply and conservation."

Whether the issue is expressed as one of "need" or "alternatives" the public interest regulations require a more searching analysis of this important water supply issue. The Corps cannot accede to Virginia Beach's desire to have an autonomous water supply at the expense of the basin without at least examining the water supply available from its current source. No meaningful analysis of the extent of the public need for the project could otherwise be conducted. The need

with the Environmental Protection Agency and not the Corps of Engineers. Corps regulations specifically require consideration of alternatives in the public interest review.

for the project depends on how much water Virginia Beach needs which in turn requires an analysis of its current supply.

The federal defendants and Virginia Beach repeatedly argue that as the diversion is only a "minuscule" portion of the abundant flow of the Roanoke River (about 1.2% of average flow) and the environmental impacts of such a proposal nearly "nonexistent," Virginia Beach's request for an autonomous water supply must be given priority in any public interest analysis. Such an argument, however, ignores the purpose of the public interest review and the correlative search for alternative courses of action. Nonsignificant impact does not equal no impact, and the purpose of the public interest review is to consider and balance competing interests, NEPA and non-NEPA factors, to determine whether the project is in the interest of the public. It requires the Corps to search for the least harmful alternative that is feasible. See River Road Alliance, Inc. v. Corps of Engineers, 764 F.2d at 452 (7th Cir. 1985).

Water is one of the most valuable and indispensable of our resources. When it is diverted from one location to another nearly 100 miles away, the source in the original area is depleted. Although the Corps asserted that the reallocation would not be an "irreversible" commitment of water because "roughly the same quantity of rain will continue to fall on the Roanoke River Basin," Norfolk Record 74, SOF at 4, this argument ignores reality and defies logic. Any diversion of water from the basin is contrary to its interest and must be balanced against the actual need for the diversion of the water. Whether the diversion is 1% or 99% of the river's average flow, a searching analysis of the actual need for water including an assessment of the supply currently available is a necessary component of any attempt to assess the extent of the public need for the project.

This is not to suggest that the Corps may not examine Virginia Beach's goals in its public interest review. Those

goals, however, must be considered in conjunction with the needs of the basin.

This is not to suggest that the Corps may not examine Virginia Beach's goals in its public interest review. Those goals, however, must be considered in conjunction with the needs of the basin.

In a related argument the plaintiffs contend that the Corps failed to adequately analyze alternatives to the pipeline project, including the interconnection of regional water supplies, conjunctive use of ground water and the indirect reuse of treated waste water. The Corps did assess these alternatives individually, and its analysis was not arbitrary and capricious. Furthermore, North Carolina argues that the Corps arbitrarily failed to consider alternative rivers for the pipeline project because the Corps determined that they would not support a 60 mgd withdrawal. It argues that such analysis is arbitrary and capricious since the Corps never assessed whether 60 mgd was actually needed. Although the

Corps did state that none of these alternatives would support a 60 mgd withdrawal, the Corps rejected alternative sites for the pipeline for additional environmental reasons. For example, the Corps stated that the streams were brackish and would require desalting, a longer pipeline would be required, and each alternative would implicate more environmentally and socially sensitive areas than the Lake Gaston alternative. Therefore, the Corps' rejection of alternative sites for the project was reasonable and supported by the record.

North Carolina argues that the consideration of alternative sources was arbitrary and capricious because the Corps failed to consider any alternative sources that could be implemented serially or in tandem to meet the entire 60 mgd request. The Corps, in effect failed to consider a conjunctive series of alternatives to supply Virginia Beach with its needed water. Although the Corps did not consider any combination of alternatives, the court cannot say that such a failure was arbitrary and capricious. The requirement that the Corps

consider alternatives in its analysis is to permit a reasoned choice. It is not required "to consider in detail each and every conceivable variation of the alternative stated." Coalition for Responsible Regional Development v. Coleman, 555 F.2d at 400. The Corps took a hard look at alternative sites for the pipeline project and solutions which would avoid the pipeline project altogether. Such analysis was a reasoned consideration of alternatives and no more is required.

In sum, the court holds that the decision of the Corps that there is a need for the pipeline project was reasonable. However, the court further holds that the Corps erred in not making a determination, as a part of its public interest review, of the extent of the applicant's need.

2. Legality of the Pipeline Project

North Carolina and RRBA argue that the Corps' public interest analysis was flawed because the Corps refused

to consider legal obstacles to the pipeline project. Plaintiffs argue that landowner riparian rights prohibit the transfer of 60 mgd out of the Roanoke River Basin to Virginia Beach. Plaintiffs also argue that North Carolina and Virginia both have laws which prohibit the transfer of water from one river basin to another. See, e.g., Norfolk Record 188 at 15; N.C. Gen. Stat. §§ 143-215.47 (1983) and 153A-285 to 287 (1983). Failure to consider these laws in the public interest analysis was allegedly arbitrary and capricious.

The public interest review regulations require that the Corps consider and weigh factors which become relevant in each particular permit review, including consideration of property ownership when applicable. 33 C.F.R. § 320.4(a)(1). The Corps did not examine the issue of riparian rights in its public interest analysis, although it did examine riparian rights with reference to 40 C.F.R. § 1508.27(b)(10) in its NEPA review and concluded that the purpose of riparian doctrine was not the protection of the

environment. However, the failure of the Corps to consider riparian landowner rights in its public interest analysis was not arbitrary and capricious.

A riparian owner is entitled to make a "reasonable" use of water adjacent to his property provided the user does not injure the rights of downstream riparian owners. Bruton v. Carolina Power & Light Co., 217 N.C. 1, 6 S.E.2d 822 (1940). Interference with riparian rights is an actionable tort. Springer v. Joseph Schlitz Brewing Co., 510 F.2d 468, 470 (4th Cir. 1975). A municipal diversion of water for public water supply is not a riparian use, and if the diversion causes injury to downstream riparian owners the injury may be redressed in a court of law. Pernell v. City of Henderson, 220 N.C. 79, 16 S.E.2d 449 (1941). Should a riparian owner suffer ascertainable injury by the diversion, those rights would be properly addressed in a court of law in a civil action for injunctive relief, City of Durham v. Eno Cotton Mills, 141 N.C. 615, 54 S.E.453 (1906), or

damages. Spaugh v. City of Winston-Salem, 249 N.C. 194, 105 S.E.2d 610 (1958).

Although riparian interests may be implicated by the pipeline project, any injuries from the diversion should be properly brought in a civil action for damages or injunctive relief. Issuance of the permit confers no property rights and would not alter the rights of property owners or the duties of Virginia Beach pursuant to riparian doctrine. Riparian doctrine is simply not relevant to the permit application consideration.

Similarly, the Corps did not err in determining that the legality of the interbasin transfer of water was not a matter appropriate for the Corps' consideration. Most of the comments received by the Corps at the public hearings by those opposed to the project were directed toward the interbasin transfer of water for such a long distance. Those living in the Roanoke River Basin are concerned that the withdrawal of any amount of water for interbasin transfer is

unwise because it sets a precedent and because there is a possibility of future needs within the basin. The Corps has very properly stated that the wisdom of interbasin transfer, as such, is not for it to decide. That is a political question and must be decided by the states or by the Congress. Despite its protests, however, the Corps does have a role in the allocation of water resources within and without the basin. As mentioned earlier, under the public interest review it must consider "water supply and conservation."

C. WATER SUPPLY
 REALLOCATION CONTRACT

North Carolina and RRBA contend that the water supply reallocation contract entered into by the Wilmington District Corps on behalf of the United States with Virginia Beach was an arbitrary and capricious exercise of its authority. The contract reallocates 10,200-acre feet of storage space in Kerr Reservoir from power supply to water supply for the use of Virginia Beach sufficient "to meet a

water supply withdrawal of 60 mgd." Wilmington Record at 17, FONSI at 1. The contract grants the right to the city to order the government to make releases through the dam to the extent of the storage. However, the government reserves the right to maintain downstream releases to meet its established water requirements and reserves the right not to make downstream releases during such time when it is deemed necessary to inspect, maintain or repair the project.

North Carolina and RRBA challenge the decision of the Corps to enter into the contract as arbitrary and capricious based on alleged violations of NEPA. Plaintiffs admit that the environmental effects of the water reallocation contract are in most respects the same as those which result from issuance of the permit. The Wilmington District Corps adopted the EA of the Norfolk Division and issued its own FONSI. The court has addressed each of the contentions based on the EA and FONSI and will not rehash them here. To the extent that the court remands the case to the Corps for

consideration of the project's impacts on striped bass, the Wilmington District Corps must also consider the impacts, if any, on striped bass resulting from the water storage reallocation contract.

In addition, however, North Carolina and RRBA contend that the water storage reallocation contract results in a permanent, irreversible and irretrievable commitment of resources which requires preparation of an EIS based on 42 U.S.C.A. § 4332(c)(v). However, that section provides only that the agency must in all major federal actions significantly affecting the quality of the human environment prepare a detailed statement addressing "any irreversible and irretrievable commitments of resources which would be involved in the proposed action. . . ." 42 U.S.C.A. § 4332(c)(v). When there are no significant environmental effects no such examination is required.

North Carolina argues that the Corps failed to consider alternatives to the water storage contract as required

by 42 U.S.C.A. § 4332(E) of NEPA. The Wilmington District Corps adopted the EA of the Norfolk District Engineer, including his discussion of alternatives to the proposed project. North Carolina complains that the Norfolk Record EA discusses only alternatives to the pipeline but not to the water storage reallocation contract. Therefore, failure to consider alternatives to the contract was arbitrary and capricious. However, the court does not view the issue so narrowly. The Wilmington and Norfolk Division District Corps coordinated efforts in considering Virginia Beach's application for the project and the water supply contract. The water contract serves as the backup to the pipeline project and also serves to mitigate the effects of the pipeline withdrawal. As such the consideration of alternatives was reasonable and supported by the record.

North Carolina and RRBA further allege that the Corps acted in violation of law in entering into the water supply contract by becoming a partisan in a water dispute

between North Carolina and Virginia. The Corps' internal regulations provide:

The Corps should not become involved in resolving conflicts among water users over the right to use stored water for water supply purposes, but will look to responsible state agencies to resolve such conflicts. . . . Possible encroachment of the operation of water supply storage on the lawful water uses in the downstream areas will be carefully considered and fully coordinated with the responsible local interests as well as with the state agency responsible for the administration of water rights and water laws.

Wilmington Record 20, ER 1105-2-20, § 7-2a(6).

Furthermore, the Water Supply Act of 1958, 43 U.S.C.A.

§ 390b(a), provides:

It is hereby declared to be the policy of the Congress to recognize the primary responsibilities of the States and local interests in developing water supplies for domestic, municipal, industrial, and other purposes and that the Federal Government should participate and cooperate with States and local interests in developing such water supplies in connection with the construction, maintenance, and operation of Federal navigation, flood control, irrigation, or multiple purpose projects.

By allocating water supply to one side of a water dispute, it is argued, the Corps abrogated its responsibility pursuant to law and regulation. North Carolina specifically alleges that the Corps did not coordinate its efforts with North Carolina officials and agencies in entering into the contract. Again, the court does not view the contract and permit decisions narrowly and separately as is suggested by the plaintiffs. The Corps did coordinate with agencies in its review process and it did not abrogate its responsibilities pursuant to law or regulation. Plaintiffs' conclusory allegations are not supported by the record.

In addition, plaintiffs argue that the Corps violated laws prohibiting the interbasin transfer of water by entering into the water storage reallocation contract. That issue, however, has no more application in this context than it did in the permit consideration. See § V(B)(2).

D. BIAS

Plaintiffs argue that the Corps' decision-making process was tainted by bias. The Corps was accused of being result oriented, having made an a priori decision to grant the permit and then building a record to sustain the decision. As an example, RRBA accused the Corps of maneuvering the Environmental Protection Agency Region IV out of the comment process because it would comment that the project would adversely affect water quality in the Roanoke River in North Carolina. However, the allegations of bias and unevenhanded treatment are not supported by the record. The permit consideration process spanned a period of six months and included three extensive public hearings. The Norfolk Administrative Record consists of thirteen volumes, including 254 exhibits, many of which span hundreds of pages. Hundreds more pages of documents were admitted by the court to supplement the record. The Wilmington Record also spans many volumes and

documents. Although it has been a very time-consuming process, the court has read all documents in the record, none of which evidence any bias on the part of the Corps of Engineers. Although the Corps failed to consider some relevant factors which require a remand for the reconsideration of its determination, on the whole the Corps' decision reflects a careful analysis of the environmental and nonenvironmental factors implicated by the permit and water storage reallocation contracts. Allegations of bias are simply not borne out by the record.

VI. CONCLUSION

Plaintiffs ask the court to declare the permit and the water supply storage agreement null and void.¹⁷ They also seek an order from this court requiring the Corps to conduct

¹⁷ No interim injunctive relief was sought and apparently none is needed as it appears that Virginia Beach is awaiting a resolution of this action before commencing its work.

an EIS before any further permit is issued or contract entered into. However, the administrative record does not disclose anything mandating the preparation of such a statement. Rather, the deficiencies disclosed by the court's review of the record require a remand of the proceeding to the Corps for further consideration. On remand, the Corps shall:

1. As a part of its NEPA review make an independent assessment of the effects of the proposed project on striped bass to determine whether the preparation of an EIS is required or whether any mitigative measures are necessary; and,

2. As a part of its public interest review make a determination of the extent of Virginia Beach's water needs.

The court will retain jurisdiction of this matter for further review.

The Corps will file with the court the results of its reconsideration and the record supporting its decision.

This 7 day of July 1987.

W. EARL BRITT
United States District Judge

APPENDIX E

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NORTH CAROLINA
RALEIGH DIVISION
No. 84-36-CIV-5**

STATE OF NORTH CAROLINA,
et al.,

Plaintiffs,

v.

ORDER

COLONEL RONALD E. HUDSON,
et al.,

Defendants.

In accordance with the memorandum opinion entered this date, this matter is hereby remanded to the Corps of Engineers for further consideration. On remand the Corps shall:

1. As a part of its NEPA review make an independent assessment of the effects of the proposed project on striped bass to determine whether the preparation of an

EIS is required or whether any mitigative measures are necessary; and,

2. As a part of its public interest review make a determination of the extent of Virginia Beach's water needs.

The court retains jurisdiction of this matter for further review and directs the Corps to file with the court the results of its reconsideration and the recording supporting its decision.

This 7 July 1987.

W. EARL BRITT
United States District Judge

APPENDIX F

42 U.S.C. § 4332

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall --

* * *

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on --

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of

man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, and shall accompany the proposal through the existing agency review processes.

APPENDIX G

ATLANTIC STRIPED BASS CONSERVATION ACT: AUTHORIZATION

PUBLIC LAW 100-589, 102 STAT. 2984 (1988)

SEC. 5. STUDY OF STRIPED BASS IN ALBEMARLE SOUND AND ROANOKE RIVER BASIN

(a) FINDINGS. -- Congress finds that:

(1) The anadromous stock of striped bass in the Albemarle Sound-Roanoke River Basin area of North Carolina sustained important commercial and recreational fisheries as recently as the 1960's and 1970's.

(2) This stock has been declining for some time and is severely depressed at present, and may soon reach a level from which recovery will be exceptionally difficult.

(3) The reasons for this decline are thought to include fishing; other human activities and environmental factors, such as unsuitable water flow before, during, and after critical spawning periods; degradation of water quality

by pollutants; the impact of eutrophication on the food chain, and the impact of changing land use activities.

(4) Current Federal and interstate efforts to conserve the Atlantic striped bass, while effective in identifying factors contributing to the decline of other important Atlantic coastal migratory stocks of striped bass and steps that will be effective in reversing that decline, have not made a major contribution to the protection and restoration of the Albemarle Sound-Roanoke River stock of striped bass.

(5) Because the striped bass and the aquatic environment of the Albemarle Sound-Roanoke River basin presently are being significantly affected by combined but not fully understood causes, a study should be undertaken to obtain additional biological information to understand the significance of fishing, water flows, and other factors in the decline of the striped bass populations in the Albemarle Sound-Roanoke River basins and, if feasible, develop an effective course of action for restoring these important stocks

of striped bass.

(b) STUDY. --

(1) IN GENERAL. -- The Director of the United States Fish and Wildlife Service, in consultation with the Assistant Administrator for Fisheries of the National Oceanic and Atmospheric Administration shall --

(A) immediately undertake a biological study of the striped bass fishery resources and habitats of the Albemarle Sound-Roanoke River basin area;

(B) develop short-term and long-term recommendations for Federal and State government agencies for restoring and conserving such resources and habitats; and

(C) submit the results of such study and such recommendations to the Congress and to the States of North Carolina and Virginia as soon as practicable, but not later than 36 months after the date of the enactment of this Act.

(2) CONTENTS OF THE STUDY. -- The study conducted under this subsection shall, to the extent existing data are adequate, use such existing data and shall include --

(A) a description of the Albemarle Sound-Roanoke River basin area, and an investigation and analysis of the effects of land and water use practices on the striped bass population and habitats of the area;

(B) an investigation and analysis of the abundance and age of the geographic distribution of the Albemarle Sound-Roanoke River stock of striped bass, including the amount and geographical location of migration and spawning habitat;

(C) an investigation and analysis of factors that may affect the abundance and age and geographic distribution of the Albemarle Sound-Roanoke River stock of striped bass, including --

(i) the extent and causes of mortality

at successive stages in the life cycle of striped bass, including mortality due to recreational and commercial fishing; and

(ii) the combined effects of pollution and other natural and human alterations of the physical environment, including the effects of water withdrawals, discharges, and flows, on striped bass migration and spawning and on the viability and condition of eggs and larval fish;

(D) an investigation and analysis of the status and effectiveness of current striped bass management measures implemented by State and Federal authorities, including State fishing regulations and Federal fish stocking activities, reservoir management and water flow regulation, and an analysis of whether any additional State or Federal measures would be effective in halting the decline and initiating the

recovery of the Albemarle Sound-Roanoke River stock of striped bass; and

(E) a recommendation of whether conservation of the Albemarle Sound-Roanoke River stocks of striped bass could be improved by management of these stocks under the provisions of the Atlantic States Marine Fisheries Commission's Interstate Fisheries Management Plan for Striped Bass and the Atlantic Striped Bass Conservation Act.

(c) PARTICIPATION BY STATE AGENCIES. --

(1) The Director of the North Carolina Division of Marine Fisheries, the Executive Director of the North Carolina Wildlife Resources Commission, the Secretary of the Virginia Department of Natural Resources, and the District Engineer for the Wilmington District of the United States Army Corps of Engineers shall be invited to have their agencies participate in conducting the study

and developing recommendations pursuant to subsection (b).

(2) To facilitate participation by the agencies referred to in paragraph (1), should the decide to participate, a Memorandum of Understanding will be executed with such officials setting forth the respective responsibilities of the entities involved in conducting the study and developing those recommendations.

(d) CONSULTATION. -- In carrying out the study under subsection (b), the Atlantic States Marine Fisheries Commission, other Federal agencies, the Albemarle-Pamlico Estuarine Study, Dominion Resources, Inc./Virginia Power/North Carolina Power, affected local governments in North Carolina and Virginia, appropriate commercial and recreational fishing interests, and other interests shall be consulted, to the maximum extent practicable.

(e) AUTHORIZATION OF APPROPRIATIONS. -- There

is authorized to be appropriated the sum of \$1,000,000 to carry out the requirements of this section. The appropriations will remain available until expended.

(f) STATE AUTHORITY. -- Nothing in this section shall be construed as authorizing any State to manage fisheries within the jurisdiction of another State.

(g) RESTRICTIONS OF USE OF OTHER FUNDS. -- Amounts appropriated pursuant to the authorization contained in section 7(d) of the Anadromous Fish Conservation Act (16 U.S.C. 757g(d)) shall not be used to carry out this section.

APPENDIX H

33 C.F.R. § 325.3 Public Notice.

(a) General. The public notice is the primary method of advising all interested parties of the proposed activity for which a permit is sought and of soliciting comments and information necessary to evaluate the probable impact on the public interest. The notice must, therefore, include sufficient information to give a clear understanding of the nature and magnitude of the activity to generate meaningful comment. The notice should include the following items of information:

* * *

(13) Any other available information which may assist interested parties in evaluating the likely impact of the proposed activity, if any, on factors affecting the public interest.

APPENDIX I

40 C.F.R. § 1500.1 Purpose.

(b) NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

APPENDIX J

40 C.F.R. § 1506 Public Involvement.

Agencies shall: (a) Make diligent efforts to involve the public in preparing and implementing their NEPA procedures.

(b) Provide public notice of NEPA-related hearings, public meetings, and the availability of environmental documents so as to inform those persons and agencies which may be interested or affected.

APPENDIX K

40 C.F.R. § 1507.1 Compliance.

All agencies of the Federal Government shall comply with these regulations.

APPENDIX L

40 C.F.R. Part 1508

§ 1508.3 Affecting.

"Affecting" means will or may have an affect on.

§ 1508.7 Cumulative Impact.

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

§ 1508.27 **Significantly.**

"Significantly" as used in NEPA requires considerations of both context and intensity:

* * *

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

* * *

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

* * *

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.